State of Wisconsin
Governor Scott Walker

Department of Agriculture, Trade and Consumer Protection
Ben Brancel, Secretary

DATE: May 11, 2017

TO: Board of Agriculture, Trade and Consumer Protection

FROM: Ben Brancel, Secretary
John Petty, Administrator, Agricultural Resource Management Division

SUBJECT: **Wisconsin Nutrient Management; Final Draft Rule, modifies Wis. Admin. Code Ch. ATCP 50**

PRESENTED BY: Agricultural Resource Management Division

REQUESTED ACTION:

At the May 25, 2017, Board meeting, the Department of Agriculture, Trade and Consumer Protection ("Department") will ask the Department Board to approve the Final Draft rule (copy attached) revising ch. ATCP 50, related to soil and water resource management.

Summary

This rule will modify the Soil and Water Resource Management ("SWRM") Program under Wis. Admin. Code ch. ATCP 50, primarily for the purpose of incorporating the changes to the United States Department of Agriculture's ("USDA") Natural Resources Conservation Service ("NRCS") 2015 version of the 590 Nutrient Management Standard ("2015-590 NM Standard") for the purposes of implementing ch. NR 151 adopted by the Department of Natural Resources ("DNR") in 2011 ("2011 DNR standards").

Related Statutes and Rules

There are no directly related rules or statutes, other than those cited above.

Background

In addition to updating the nutrient management standard, other changes in the rule are designed to improve administration of the SWRM program, including clarifying conservation compliance requirements for farmland preservation, cost-sharing, and local ordinances. In Wisconsin, a Nutrient Management ("NM") plan may be required if the landowner is subject to a county or local ordinance such as ordinances for manure storage or livestock siting. The Department's proposed rule revision clarifies that a NM plan, and subsequent annual submissions for local regulation mean NM plans developed according to Wis. Admin. Code § ATCP 50.04(3). Therefore, should this rule revision be adopted, after the effective date of this rule, all NM plans developed for county or local ordinances must comply with the 2015-590 NM Standard. In the case of the 13,500 farmers who collected $18 million in farmland preservation tax credits (based on 2015 payments for tax

year 2014 claims), they may be required to comply with new and modified standards without receiving cost-sharing. The rule:

- Requires annual NM plans developed according to Wis. Admin. Code ATCP 50.04(3) for local regulation in Subchapter VII.

- Clarifies that the alternative related to Wis. Admin. Code NR 151.04, the phosphorus index ("PI"), is a nutrient management plan developed in accordance with the nutrient management provisions in Wis. Admin. Code 50.04(3).

- Increases the associated NM cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions in Subchapter V.

- Marginally increases the demand for professional nutrient management planners to develop nutrient management plans. Nutrient management planners who prepare plans for others must be qualified to do so.

Land and Water Conservation Board

The Land and Water Conservation Board has reviewed this rule as required by Wis. Stat. § 92.04(3)(a).

Fiscal Impact

This rule incorporates the 2015-590 NM Standard and its provisions to protect human health and the environment. The rule does not mandate any local government resources be expended on the development, review, or approval of nutrient management plans beyond their current commitments, and is not expected to have a fiscal impact on local units of government. County land conservation department staff and agricultural agents will likely receive requests for information on provisions of the rule with no net fiscal impact. This rule will impact farmers. A majority of farmers qualify as "small businesses." The analysis of the impact on farms takes into consideration that most farmers will be insulated from some of the costs of implementation by the state's cost share requirement and the limited state funding available to provide cost-sharing. For farmers receiving farmland preservation tax credits, this rule provides farmers flexibility to minimize the financial impacts related to compliance (which range from $8 to $12 million state-wide), including a delay in the effective date for compliance with the 2011 DNR standards, the use of performance schedules, pursuit of cost-sharing for which they are eligible, use of a tax credit to offset some implementation costs, or if needed, withdrawal from the farmland preservation program to avoid unmanageable costs.

The proposed rule changes will have small, but positive impacts on businesses other than farmers. Those businesses include nutrient management planners, soil testing laboratories, farm supply organizations, agricultural engineering practitioners, and contractors installing farm conservation practices. The Final Regulatory Flexibility Analysis provides a more complete analysis of this issue.

Effect on Small Business

This rule will have a moderate impact on farms in this state. Many of these farms are "small businesses." This rule may also affect the following businesses:

- Nutrient management planners, including private crop consultants, farm cooperatives, and farm supply organizations that provide nutrient management planning.
- Soil and manure testing laboratories and businesses that haul manure.
- Commercial fertilizer dealers.
- Businesses that design and install farm conservation practices.

This rule will have the greatest impact on livestock operations, which may incur additional costs related to the disposal of manure (provides more phosphorus than nitrogen, compared to crop needs). Additional costs will be mainly related to manure hauling. The cost for an individual livestock operation will depend on a number of factors, but the existing level of soil test phosphorus and soil erosion is critical. If these levels are reduced, costs will be lower over time.

This rule continues to allow farmers to choose the best way to comply. A farmer may choose among conservation practices that are appropriate for the farm. Farmers continue to have access to a range of resources such as the Department, UW-Extension, NRCS, and the county land and water conservation departments to secure technical assistance.

The Department has not changed the requirement for cost-sharing when a landowner is required to install conservation practices. Under state law, compliance with the performance standards is not required for existing nonpoint agricultural facilities and practices unless cost sharing is made available for eligible costs.

Analysis and Supporting Documents used to Determine Effect on Small Business

Wisconsin has 9.1 million acres of cropland, not including pastures. Currently about 2.9 million acres are implementing nutrient management plans, which leaves 6.27 million acres yet to have plans developed. The cost share rate of $7 per acre will increase to $10 per acre due to the additional costs and spreading restrictions. The increase in the cost share rate for 2015-590 NM plans is attributed to an increase in costs for soil testing and labor, additional restrictions in the 2015-590 NM Standard that may require more land to apply manure compared to the 2005-590 NM Standard, and a potential increase in the amount of time spent by NM planners to develop a NM plan that complies with the 2015-590 NM Standard. The potential need for more land to apply manure is due to the additional spreading restrictions; however, not all farms will be impacted to the same degree by these restrictions. If these landowners are offered 70% cost-sharing, they would be responsible for paying 30% of the $10 cost per acre.

Economic Impact

Long-term, implementing this rule will benefit business, the general public, and the environment. The rule modifications will provide additional options for businesses to meet existing regulations

more efficiently and additional marketing opportunities that could lead to new business. In addition, the rule modifications create consistency between the state and federal standard, this rule, and other existing rules. The rule will also benefit the public and the environment by ensuring reasonable requirements to protect people and the environment.

Environmental Impact

This rule will implement the 2011 DNR performance standards and make improvements in Department programs, which will facilitate implementation of these standards. Overall, this rule will have a positive effect on the environment. However, implementation of conservation practices will depend on available cost-sharing. There are no preferable alternatives to this rule. This rule is not a "major action significantly affecting the quality of the environment," for purposes of Wis. Stat. § 1.11. No environmental impact statement is required under Wis. Stat. § 1.11, or Wis. Admin. Code ch. ATCP 3.

Additional spreading restrictions include:

- Prohibiting nutrient applications within 50' of all direct conduits to groundwater where only grazing and a limited amount of corn starter fertilizer may be applied.

- Prohibiting applications of manure within 100' of a non-community well, which includes schools, restaurants, churches, and within 1000' of a community well, unless the manure is treated to reduce pathogen content.

- Prohibiting winter nutrient applications within 300' of all direct conduits to groundwater, unless manure is directly deposited by gleaning or pasturing animals. This setback increased from the 200' setback in the 2005-590 NM Standard.

- Prohibiting liquid manure application in February or March on DNR Well Compensation Areas, or on fields with Silurian Dolomite bedrock within 5' of the surface.

- Limiting winter manure applications when frozen or snow-covered soils prevent effective incorporation. The NM plan must limit these applications when slopes are > 6% and if fields have concentrated flow areas using 2 practices listed in the winter application section of the 2015-590 NM Standard.

- Limiting late summer or fall commercial N fertilizer applications are limited in areas within 1,000 feet of a community well, 5 feet or less over bedrock, sites vulnerable to N leaching high permeability ("P") soils, rock ("R") soils with < 20 inches to bedrock, or wet ("W") soils with < 12 inches to apparent water table. The fall N rate was increased from 30 to 36 lbs. of N per acre to match common blended fertilizers if other nutrients are needed. Manure N rates of 90 or 120 lbs. N per acre depending on the crop, manure dry matter, and soil temperature.

Federal and Surrounding State Programs

Federal Programs

While NRCS sets national standards, standards vary, to some extent, between states. NRCS coordinates its Wisconsin standard-setting process with the Department, DNR, counties, and others. For purposes of Wisconsin's soil and water conservation program, the Department may incorporate NRCS standards as written or may modify the standards as appropriate.

The U.S. Department of Agriculture administers a number of federal programs that offer voluntary conservation incentives to farmers. The Environmental Quality Incentives Program ("EQIP") is a key program offering cost-sharing for conservation improvements, including nutrient management plans, manure storage improvements and other conservation practices. As a result of confidentiality requirements, federal cost-sharing provided to landowners through this and other NRCS cost share programs cannot be publicly disclosed. Without accurate historical data about past use of NRCS cost-sharing to implement state conservation standards, it is difficult to account for the role these funds may play in the future.

Surrounding State Programs

Wisconsin's approach differs from the programs in adjacent states in that it has more detail in its state nutrient management standard and it applies to more small and medium size farming operations than in other states. However, in Wisconsin, pursuant to Wis. Stat. § 281.16, cost-sharing must be made available to existing agricultural operations before the State may require compliance with the standards.

In general, adjacent states do not use statewide performance standards specifically designed to address polluted runoff from agricultural sources. However, these states have various regulations and procedures in place to address many of the polluted runoff sources that this rule revision addresses. All four states use the NRCS 590 Nutrient Management Standard to steer their implementation of agricultural nutrient management. All four states use the phosphorus index in some form. For example, nutrient management strategies in Michigan are implemented as part of the state's Generally Accepted Agricultural and Management Practices ("GAAMPs").

Data and Analytical Methodologies

The Department worked with NRCS, DNR, UW, county conservation departments, farmers, and representatives of the agriculture industry, to develop standards contained in this rule.

Public Hearings

The Department held nine public hearings in January at these locations with several different time slots each:

- Eau Claire, WI: Monday, January 9, 2017, Chippewa Valley Technical College
- Platteville, WI: Thursday, January 19, 2017, UW Platteville

- Appleton, WI: Monday, January 23, 2017, Fox Valley Technical College
- Madison, WI: Thursday, January 26, 2017, Department Boardroom

Eighty people attended the hearings. Two attendees opposed the rule. Five people testified. Twenty-nine people submitted comments that did not directly relate to the 2015-590 NM Standard or to this Final Draft rule. Comments related to Concentrated Animal Feeding Operations were beyond the scope of this rule. Eight comments related to winter spreading requirements, monitoring, and implementation. The Department's response to these comments is that the 2015-590 NM Standard has significantly increased winter application restrictions from the previous standard. Implementation of winter conservation practices and application requirements will be addressed in the planning software, SnapPlus. Additionally, other implementation mechanisms are the requirements of cost share contracts, ordinances, permits, and the Farmland Preservation Program. Lastly, the county land conservation departments review implementation of all the conservation practices every four years at a minimum, for FPP and more often if required locally for ordinances and permits.

Changes from the Hearing Draft

The Department incorporated all of the editorial changes suggested by the Legislative Council Rules Clearinghouse. These changes were not substantive. Minor technical changes were made to update standards for cost-shared practices in subchapter VIII. Comments related to implementing the 590 NM standard will be addressed through the 2015-590 NM Standard Checklist and the SnapPlus software. The comments receive at hearing did not result in changes to the proposed rule.

Next Steps

If the Board approves this Final Draft rule, the Department will transmit the rule to the Governor for his written approval. After the Department receives written approval from the Governor, the Department will submit the rule to the Legislature for review by appropriate legislative committees. If the Legislature takes no action to stop the rule, the Secretary will sign the final rulemaking order and transmit it for publication.

ATCP 50 Public Hearing Comment Summary

Nine public hearings were held in January 2017 with the following attendance: Eau Claire 19, Platteville 32, Appleton 13, and Madison 15. Eighty people attended hearings or provided comments. Five people publically testified. Twenty-nine people submitted the comments summarized below (25 written, four verbal). The Department requested all hearing attendees fill out an appearance card, which showed 2 opposed the rule, 11 supported the rule, 8 in favor of some parts and opposed to others, 37 had no position on the rule, and 7 checked other. No response was listed for 27 people.

Public comments related to implementing the 590 standard will be addressed through the 2015-590 NM Standard Checklist and the SnapPlus software. Public comments received did not result in changes to ATCP 50 or the 2015-590 NM Standard. Several technical changes are included in this rule revision to update standards for cost-shared practices in subchapter VIII of ch. ATCP 50.

A summary of the comments are listed below with DATCP responses to the comments in boxes under each comment summary.

DNR WPDES Permits Concerns Unrelated to ATCP 50 Rule Revision

1. Who is being held accountable? How do you know if the NMP is actually followed? Unclear if DNR permit 113, 204, 214 are required to follow 590 applications.

ATCP 50 Wis. Admin. Code and the 2015-590 Nutrient Management Technical Standard direct nutrient applications for the reduction of non-point source pollution to surface and groundwater. DNR regulates point source pollution sources through the DNR permits mentioned above. Comments related to DNR permits are beyond the scope of our administrative rule revision.

Winter Spreading Requirements and Related Provisions - ATCP 50.04(3), 2015-590 Standard IV.A.2.d.

2. Current practices are unacceptable. Supportive of stricter manure runoff rules. Manure runoff is a huge problem and abusive manure spreading practices are rampant. Present methods are not acceptable as water quality will only get worse. Clarify the winter mitigation practices and provide a process for emergency winter applications. Need reserve fund for well replacements. Need a 50 foot permanent buffer around wells. Pay for it with WI agricultural manufacturing credit fact sheet 1107 tax credit.

ATCP 50 and the 2015-590 Nutrient Management Technical Standard direct nutrient applications for the reduction of nonpoint source pollution to surface and groundwater. The winter manure setback from direct conduits to groundwater increased from 200' to 300', and the 2015-590 Standard includes a prohibition for liquid manure in February and March, on Silurian dolomite and where well compensation funds replaced water supplies. A 50 foot prohibition area around all conduits to groundwater for mechanically applied manure and non-starter fertilizer was added, however requiring a permanent vegetative buffer around these features was not included in the 2015 590 revision. The winter mitigation practices will be further clarified through nutrient management software, SnapPlus, which will identify fields that are implementing the mitigation practices and those with low runoff risk for winter applications.

NM Cost Share Rate Increase - ATCP 50.42(2)

3. Land conservation departments request that the increased cost share rate of $10 per acre be provided after the rule is approved. This will prevent inconsistency between counties and reduce implementation problems with back payments. One county opposed the increase.

Current nutrient management planning costs in ATCP 50 are estimated from 2002 and 2007 they have increased for soil test analysis, labor, and the 2015-590 standard has more restrictions that may require more land for manure applications. It is true that those with manure storage may not have increased winter spreading costs, but the majority of the farms in Wisconsin daily haul and are likely to see increased costs. The proposed $10 per acre cost share rate will be effective upon the promulgation of this rule, which is projected for late 2017. Farms contracting for cost-share in 2017 can sign a change order to increase the cost-share to match the new rate after the rule is promulgated.

Presumptively Qualified Nutrient Management Planners and NM Checklists - ATCP 50.48

4. Amend section to add soil scientists licensed by the State of Wisconsin to the list of planners presumptively qualified to prepare nutrient management plans.

The privately held certifications in ATCP 50.48 require continuing education and code of ethics provisions, which are important to ensure ongoing expertise in nutrient management planning. Licensing, by the State of Wisconsin, for soil scientists does not include those important provisions.

5. Persons who train farmers to write their own nutrient management plans should hold one of the private certifications. How are they determined to be knowledgeable in NM planning? Training for trainers should be at least a few hours annually.

Staff who deliver farmer NM trainings are often county land conservation or UW Extension staff. Although some county conservation staff are not Certified Crop Advisers, they are assisted by DATCP staff in providing farmer training and learning the requirements of the 590 standard. Additionally, many attend the various NM update meetings held statewide each year to refresh their knowledge on pertinent NM issues and requirements. Trainers are given significant information materials and nutrient management planning curriculum to ensure farmer planners are trained adequately to write their own nutrient management plans. Additionally, farmer trainers are not hired or paid for this service by the farmers.

6. We need one 2015-590 NM Standard Checklist for all programs. Checklist should have both the agronomist and operator sign. Make planners get the operators signature on the checklist and provide tax parcels with checklist.

We are proposing to have one checklist for all programs that utilize the 2015-590 NM standard. The 2015-590 NM Checklist will require both the planner and operator signatures. Providing tax parcel information would be a significant and perhaps impossible workload for NM planners.

DATCP Certified Soil Testing Laboratories and Conflicts of Interest - ATCP 50.50(9)

7. Remove the conflict of interest provision. For purpose of complying with 50.04(3) a privately owned laboratory certified under this section can perform soil test analysis on cropland it manages and owns.

Soil test analysis results have regulatory implications; therefore, conflict of interest provisions are warranted.

UW Fertilizer Recommendations and Adaptive Nutrient Management Provisions - ATCP 50.04(3)

8. Update A2809 more often. Allow accredited research for nutrient applications. Allow GIS field data instead of soil survey. Low PI fields should be allowed to apply to P crop removal. Documenting different research plot rates is burdensome and discourages on-farm verification of the current UW fertility recommendations.

Three options currently exist to deviate from the UW fertility recommendations. ATCP 50.04(3)(f) allows for tests to show nutrient deficiencies that warrant additional nutrient applications. The 590 allows use of other Land Grant University recommendations when appropriate. Appendix 3 of the WI Technical Note allows for experimental design of replicated research over a 3-year period to enable the data to be used to update UW nutrient recommendations. If none of these options are used, then the 590 standard should be followed, including the P management options for when manure is applied during the crop rotation. If evidence exists to support deviating from using the soil type identified in the NRCS soil survey, then it should be noted and included in the NM plan. Planners may contact the NRCS Soil Science staff to communicate locations or soils needing further review.

Spreading Restriction Timeframes - 2015-590 NM Standard IV.A. and B.

9. Let's not make them any more restrictive so we aren't having farmers turn away from doing them. Delaying fall manure applications on "fall N restricted soils" from September 15 to October 1 will shorten the application time frame for these important non-winter applications.

We will continue to work with farmers through the conservation offices and agronomists to integrate the new standard practices into their nutrient plans. Many of the new provisions will be built into SnapPlus to help with implementation. The research shows that soils in the majority of Wisconsin hit the 50 degree mark in October, not September. At that temperature the nitrate-making bacteria slow and the likelihood of N loss is reduced.

DATCP Docket No. 15-R-13
Clearinghouse Rule No. 16-083

Final Rule
May 11, 2017

PROPOSED ORDER
OF THE STATE OF WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION
ADOPTING RULES

The Wisconsin Department of Agriculture, Trade and Consumer Protection proposes the following permanent rule ***to repeal*** ATCP 50.04(3)(a)(Note), 50.16(3)(b)(intro.), 1., 2., and (Note), 50.16(6)(a)(5)(Note), 50.48(2)4.(Note), 50.50(2)(g)(Note), 50.56(3)(b)1.(Note), 50.885(4)(a)2.(Note); ***to amend*** ATCP 50.04(1), 50.04(3)(dm)1., 50.04(3)(e) and (Note), 50.04(3)(f), 50.04(3)(g), 50.10(title), 50.16(3)(a)(intro.), 2., 3.(Note), 4., and 4.(Note), 50.16(4)(a), (b), and (c), 50.16(6)(b)(intro.), 50.16 (6)(d), 50.32(7)(a), 50.40(3)(b)13., 50.42(2)(g), 50.46 (3)(title), 50.48(1)(a), 50.48(2)(a)2., 3., and 4., 50.48(6), 50.50(2)(d)(intro.) and (Note), 50.50(8)(c), 50.54(2)(b)(intro.), 50.56(2)(g), 50.62(3)(d), 50.62(5)(a) and (c), 50.66(3)(a)1., 50.67(3)(a) and (b), 50.69(4)(a)1., 3., 4., 5., and 7., 50.70(4)(b)1., 2., 4., and 6., 50.705(5)(a)5., 6., 7., 50.71(3)(b)2. and 3., 50.72(3)(a)1., 3., 4., 5., and 6., 50.73(3)(d)1., 2., 3., 5., 6., 7., 9., and 12., 50.75(4)(a)2., 50.76(5)(a)4. and 7., 50.77(4)(a)5. and 7., 50.78(3)(a) and (Note), 50.80(3)(a)1., 3., 7., and 8., 50.82(4)(c)1. and 2., 50.83(3)(a)1., 3., 4., 5., and 6., 50.84(5)(a), 50.86(4)(b)1. and 2., 50.87(4)(a)1., 2., and 3., 50.88(3)(a)1., 50.885(4)(a)2., 50.89(3)(b)1. and 2., 50.91(3)(b)1., 2., 4., and 8., 50.94(3)(a)1., 3., and 4., 50.95(3)(a)1. and 3., 50.96(3)(b)1., 3., 4., and 5., 50.98(3)(a); ***to repeal and recreate*** 50.50(8)(c)(Note); ***and to create*** 50.16(6)(c)3. and 4., 50.40(11)(b)4. and (Note), 50.46(3)(c)(intro.)1., 2., 3., and 4., 50.50(9), ***relating to*** soil and water resource management and affecting small business.

Analysis Prepared by the Department of Agriculture, Trade and Consumer Protection

This rule modifies ch. ATCP 50, Wis. Admin. Code, related to Wisconsin's Soil and Water Resource Management ("SWRM") program. The Department of Agriculture, Trade and Consumer Protection ("Department") administers the SWRM program under ch. 92, Stats. The SWRM program is designed to conserve the state's soil and water resources, reduce soil erosion, prevent pollution runoff and enhance water quality.

Statutes Interpreted

Statutes interpreted: ss. 71.57 to 71.61, 71.613 (3), 91.80 and 91.82, ch. 92, and s. 281.16, Stats.

Statutory Authority

Statutory authority: ss. 91.82(3), 92.05 (3) (c) and (k), 92.14 (8), 92.15 (3) (b), 92.16, 92.18 (1), 93.07 (1), and 281.16 (3) (b) and (c).

Explanation of Agency Authority

The Department has responsibilities imposed by statute for implementing the state's nonpoint source pollution control program. Sec. 281.16, Stats., requires that the Department develop rules to implement Department of Natural Resources ("DNR") farm runoff standards, also known as the agricultural performance standards adopted in ch. NR 151, Wis. Adm. Code ("NR 151"). Chapter 92, Stats., establishes the framework for the Department to operate a statewide program that includes implementation of farm conservation practices such as nutrient management, approval of county land and water resource management plans, conservation compliance for the farmland preservation program, administration of soil and water resource management grants, oversight of manure storage and other local regulations covering livestock operations, provision of training and engineering practitioner certification, and standards for cost-sharing practices. Through ch. ATCP 50, Wis. Adm. Code ("ATCP 50"), the Department carries out these responsibilities. Among other things, ATCP 50 ensures that implementation of the farm runoff standards is contingent on cost share-requirements (see s. ATCP 50.08).

Related Statutes and Rules

As explained above, this rule is related to s. 281.16, Stats., and NR 151. Chapter 92, Stats., establishes the framework for the Department to operate a statewide soil and water resource management program. This rule also implements the soil and water conservation requirements in sub ch. V of ch. 91, Stats.

Plain Language Analysis

Background

This rule will modify the SWRM Program under ch. ATCP 50, primarily for the purpose of incorporating the changes to the United States Department of Agriculture's ("USDA") Natural Resources Conservation Service ("NRCS") 2015 version of the 590 Nutrient Management Standard ("2015-590 NM Standard") for the purposes of implementing ch. NR 151 adopted by the DNR in 2011 ("2011 DNR standards").[1]

Rule Content

Among other things, this rule:

- Replaces the farm conservation practice standard for nutrient management ("NM") and other standards for practices cost-shared in Subchapters II and VIII.

- Clarifies the requirements for farmland preservation conservation compliance consistent with the Department's voluntary approach in Subchapter III. Farmers may be required to comply with new and modified standards without receiving cost-sharing.

- Increases the associated NM cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions in Subchapter V.

- Requires annual NM plans developed according to s. ATCP 50.04(3) for local regulation in Subchapter VII. Farmers may be required to comply with new and modified standards without receiving cost-sharing.

- Clarifies that the alternative related to s. NR 151.04, the phosphorus index (PI), is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3). Meaning, the 2005 and 2015-590 NM Standard provided the PI alternative with the soil test P management strategy.

- Enables the Department to simplify the process for cancelling a conservation engineer's certification if agreed to in writing.

- Clarifies a qualified NM planner must complete a NM checklist form representing the NM plan, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent.

- Clarifies the standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility

[1] DNR's final rulemaking order of September 24, 2010, Administrative Rule Number WT-14-08, as well as revised fiscal estimate is available at https://health.wisconsin.gov/admrules/public/Rmo?nRmoId=1703

is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

- Identifies a conflict of interest prohibition for Department certified soil testing laboratories.

The following provides more detailed analysis by subchapter.

Soil and Water Conservation on Farms

Farm Conservation Practices, specifically nutrient management

To implement the 2011 DNR standards, this rule modifies the farm conservation practices as follows:

Nutrient Management and Phosphorus Index. This rule replaces the farm conservation practice standard for NM and other standards for practices cost-shared in Subchapters II and VIII. The alternative related to s. NR 151.04, the phosphorus index ("PI"), is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3). Meaning, the 2005 and 2015-590 NM Standard provided the PI alternative with the soil test P management strategy.

The Department calculates an additional $3/acre to comply with the 2015-590 NM Standard may be appropriate for those farms that have not yet developed a NM plan. The costs for soil testing and labor have increased, and additional restrictions have been added to the 2015-590 NM Standard that may require more land to apply manure compared to the 2005-590 NM Standard, and may increase the amount of time required to develop a NM plan that complies with the 2015-590 NM Standard. The potential need for more land to apply manure is due to the additional spreading restrictions listed below.

- Prohibiting nutrient applications within 50' of all direct conduits to groundwater where only grazing and a limited amount of corn starter fertilizer may be applied. This change was added to all direct conduits to groundwater, not just wells. However the 2015-590 NM Standard deletes a 200' incorporation requirement for non-winter nutrient applications, allowing farmers to use less erosive tillage practices.
- Prohibiting applications of manure within 100' of a non-community well which includes schools, restaurants, churches, and within 1000' of a community well unless the manure is treated to reduce pathogen content.
- Prohibiting winter nutrient applications within 300' of all direct conduits to groundwater, unless manure is directly deposited by gleaning or pasturing animals. This setback increased 100' from the 200' setback in the 2005-590 Standard.
- Prohibiting liquid manure application in February or March on DNR Well Compensation Areas, or on fields with Silurian dolomite bedrock within 5' of the surface.

- Limiting manure nitrogen (N) applications in late summer or fall using the lower application rate of either the current 2012 version of UW Pub. A2809 or 2015-590 NM Standard available N per acre rate for the situation on sites vulnerable to N leaching high permeability (P) soils, or rock (R) soils with < 20 inches to bedrock, or wet (W) soils with < 12 inches to apparent water table (PRW Soils). N rates of 90 or 120 lbs. N per acre have not changed. The rates depend on the crop, manure dry matter, and soil temperature.
- Limiting winter manure applications when frozen or snow-covered soils prevent effective incorporation. The NM plan must limit these applications when slopes are > 6% and if fields have concentrated flow areas using 2 practices listed in the winter application section of the 2015-590 NM Standard. These requirements do not apply to manure deposited through winter gleaning or pastoring. Farmers will need more application acreage if they choose these practice options as either or both of the required practices for each field: Apply manure in intermittent strips on no more than 50% of field; Reduce manure application rate to 3,500 gal. or 30 lbs. P2O5, whichever is less; No manure application within 200 feet of all concentrated flow channels; Fall tillage is on the contour and slopes are lower than 6%.
- Prohibiting manure applications to areas locally delineated by the Land Conservation Committee as areas contributing runoff to direct conduits to groundwater, unless manure is substantially buried within 24 hours of application. This provision now requires incorporation to reduce the risk of runoff being intercepted by the conduit to groundwater in all seasons. Therefore, winter applications are prohibited, because the manure cannot be effectively incorporated if the ground is frozen. Farmers may need more application acreage if the field's soil loss will be too high with the required manure incorporation or if crops are no-tilled. A conservation plan, signed by the land operator and approved by the county Land Conservation Committee, will be needed for designating winter spreading restrictions other than those specifically listed in this standard.

Not all of the changes to the 2015-590 NM Standard will require more land or add costs:

- Nutrients cannot be applied within 8' around an irrigation well, making this prohibition consistent with NR 812 well code. The 2015-590 NM Standard clarifies that an irrigation well does not require a 50' nutrient prohibition and incorporation of manure within 200' of the well.
- New options are now available to control ephemeral erosion, including contours, reduced tillage, adjusting the crop rotation, or implementing other practices to control ephemeral erosion. Existing options include using contour strips, contour buffer strips, filter strips, > 30% crop residue after planting, and establishing fall cover crops.
- Late summer or fall commercial N fertilizer applications are limited on: areas within 1,000 feet of a community well; 5 feet or less over bedrock; sites vulnerable to N leaching high permeability (P) soils, or rock (R) soils with < 20 inches to bedrock, or wet (W) soils with < 12 inches to apparent water table; to rates needed for establishment of fall seeded crops or to meet UWEX Pub. A2809 with a blended fertilizer. The fall N rate was increased from 30 to 36 lbs. of N per acre to match common blended fertilizers if other nutrients are needed. The 2015-590 NM Standard is likely to decrease the amount

of N fertilizer that can be applied in the fall; but, the applications can be made in the spring.

- An additional option for use on P soils, when commercial N is applied in the spring and summer has been added. These in-season applications must follow the UWEX Pub. A2809 crop N rate guidelines and apply one of the following strategies: a split or delayed N application to apply a majority of crop N requirement after crop establishment, use a nitrification inhibitor with ammonium forms of N, or use slow and controlled release fertilizers for a majority of the crop N requirement applied near the time of planting.
- More options for mechanical applications of manure or organic by-products in the winter in the surface water quality management area (SWQMA) within 1000' of lakes/ponds or 300' of rivers. A new option allows for no-till silage if nutrient applications are made within 7 days of planting. Nutrient applications in the spring, summer, and fall limit mechanical applications to 12,000 gals/acre of unincorporated liquid manure with 11% or less dry matter where subsurface drainage is present or within the SWQMA. This will be easier to implement with a single manure rate with more gallons per acre.

This rule continues to allow farmers to choose the best way to comply with this rule. A farmer may choose between conservation practices that are appropriate for the farm, as long as those practices achieve compliance. Farmers continue to have access to a range of resources such as the Department, UW-Extension, NRCS, and the county land and water conservation departments to secure technical assistance.

Cost Sharing Required

The Department has not changed the requirement for cost-sharing when a landowner is required to install conservation practices. Under state law, compliance with the performance standards is not required for existing nonpoint agricultural facilities and practices unless cost sharing is made available for eligible costs. This rule clarifies:

- The changes from the 2005-590 NM Standard to the 2015-590 NM Standard increases the associated cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- The Farmland Preservation section requirements seeking voluntary compliance with the rule changes to the maximum extent feasible, consistent with the Department's past approach. Farmers who wish to continue to participate in this program may be required to comply with new and modified standards without receiving cost sharing.

- A NM plan, and subsequent annual submissions for local regulation means NM plans develop according to s. ATCP 50.04(3). Farmers may be required to comply with new and modified standards without receiving cost sharing.

- The standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied,

the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

County Soil and Water Conservation Programs

Farmland Preservation; Conservation Standards

The impacts from this rule on farmers participating in the farmland preservation program ("FPP") arise from the changes related to FPP implementation. In the case of the 13,500 farmers who collected $18 million in farmland preservation tax credits (based on 2015 payments for tax year 2014 claims), they may be required to comply with new and modified standards without receiving cost-sharing. Identifying impacts with precision is complicated by a number of factors including the changes in program participants over time, the compliance status of new participants, and the range of options to achieve compliance. The Department's rule revision:

- Clarifies and limits impacts on this group by providing time for program participants to comply with the new performance standards, using performance schedules.

- Clarifies that certificates of compliance issued to farmers complying with standards can be modified if some land is sold. Certificates of compliance are rendered void if all the land is under new ownership or a county land conservation committee issues a notice of noncompliance if a landowner no longer complies. Conversely, a county land conservation committee can withdraw a notice of noncompliance if the landowner is again found in compliance with standards. Also, farmers may receive cost-sharing to install conservation practices necessary to maintain their eligibility for tax credits. Last, but not least, farmers who feel the compliance burdens are too great may decide to stop collecting a tax credit rather than implement standards.

- This rule ensures that a farmer's eligibility is in part based on meeting state conservation standards that mirror DNR performance standards and prohibitions. This rule clarifies that the alternative related to s. NR 151.04, the PI, is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3) and provides that in accordance with both, the 2005-590 NM Standard and 2015-590 NM Standard , the alternative to the PI is complying with the soil test P management strategy.

Grants for Conservation Practices

The Department's rule revision clarifies that a cost share grant may not be used to bring a permittee into compliance with standards under Wisconsin Pollution Discharge Elimination System permit under chs. 281 and 283, Stats.

Soil and Water Professionals

Under s. 92.18, Stats., the Department is directed to establish, to the extent possible, requirements for certification in conformance with the federal engineering approval system. This rule includes a more flexible and responsive framework for certifying engineering practitioners that better

matches the federal system, and ultimately ensures maximum capacity for design and installation of farm and other conservation practices. The Department's rule revision enables the Department to simplify the process for cancelling a conservation engineer's certification if agreed to in writing. The rule also provides for a person with the appropriate level of NRCS job approval authority to certify in writing that the practice complies with this rule.

Nutrient Management Planners

This rule will marginally increase the demand for professional nutrient management planners to develop nutrient management plans. Nutrient management planners who prepare plans for others must be qualified to do so. They must understand and follow record keeping requirements related to soil types, soil tests, crop nutrient requirements including University of Wisconsin recommendations, nutrient applications, nutrient contents of manure, nutrient application scheduling, and other matters related to nutrient management. Planners holding certain professional credentials are presumed to be qualified. Professionals with the knowledge and skill to use SnapPlus, a computer program critical to calculating the phosphorus index, are in a special position to capture new business. The rule also impacts planners requiring a qualified NM planner to complete a NM checklist form, provided by the Department, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent. The Department's rule revision:

- Clarifies the changes from the 2005-590 NM Standard to the 2015-590 NM Standard and increases the associated cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- Clarifies that the alternative related to s. NR 151.04, the PI, is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3) and provides that in accordance with both, the 2005-590 NM Standard and 2015-590 NM Standard , the alternative to the PI is complying with the soil test P management strategy.

- Requires a qualified NM planner to complete a NM checklist form, provided by the Department, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent.

County and Local Ordinances

In Wisconsin, the 590 Standard uses the current 2012 version of UW Pub. A2809 *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops* to determine the crop's nutrient needs and includes other restrictions required of NM plans developed for: DNR – Notice of Discharge or Wisconsin Pollution Discharge Elimination System permits for >1000 animal unit operations; Ordinances for manure storage or livestock siting; the Department cost share or Farmland Preservation; DNR cost share; USDA cost share; or voluntary reasons. The Department's rule revision clarifies that a NM plan, and subsequent annual submissions for local regulation means NM plans developed according to s. ATCP 50.04(3). Farmers may be required to comply with new and modified standards without receiving cost-sharing.

Standards for Cost Shared Practices

In addition to updating technical standards incorporated into this subchapter, this rule:

- Clarifies the changes from the 2005-590 NM Standard to the 2015-590 NM Standard increases the associated cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- Clarifies the standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

Standards Incorporated by Reference

Pursuant to s. 227.21, Stats., the Department has requested permission from the Attorney General to incorporate the following standards by reference in this rule:

- NRCS technical guide standards and related documentation.

- ASCE and other private sector-developed engineering practice standards.

- State agency (DNR, DOT) erosion control standards for construction sites and storm water management.

- UW-Extension publications including fertilizer recommendations, milking center waste water management, rotational grazing, and soil and manure testing.

- NRCS standards for determining soil erosion (RUSLE 2, WEPS).

Copies of these standards will be on file with the Department and the Legislative Reference Bureau. The Department has discontinued the practice of including key documents as appendices and will utilize its website to indicate where documents may be obtained.

Land and Water Conservation Board

The Land and Water Conservation Board has reviewed this rule as required by s. 92.04(3)(a), Stats.

Summary of, and Comparison with, Existing or Proposed Federal statutes and Regulations

NRCS has adopted standards for conservation practices cost shared by NRCS. Current Department rules incorporate many NRCS standards by reference. In most cases, the standards apply only to conservation practices cost shared with Department funds. But in some cases (such as nutrient management), Department rules incorporate the NRCS standards as mandatory pollution-control

standards. Enforcement of these mandatory standards is generally contingent on cost-sharing (there are limited exceptions).

While NRCS sets national standards, standards vary, to some extent, between states. NRCS coordinates its Wisconsin standard-setting process with the Department, DNR, counties, and others. For purposes of Wisconsin's soil and water conservation program, the Department may incorporate NRCS standards as written or may modify the standards as appropriate.

NRCS certifies engineering practitioners who design, install, or approve conservation engineering practices cost-shared by NRCS. The Department certifies practitioners who perform similar functions under the Department's rules. The Department's rule revision enables the Department to simplify the process for cancelling a conservation engineer's certification if agreed to in writing. The rule also provides for a person with the appropriate level of NRCS job approval authority to certify in writing that the practice complies with this rule.

The U.S. Department of Agriculture administers a number of federal programs that offer voluntary conservation incentives to farmers. The Environmental Quality Incentives Program ("EQIP") is a key program offering cost-sharing for conservation improvements, including nutrient management plans, manure storage improvements and other conservation practices. As a result of confidentiality requirements, federal cost-sharing provided to landowners through this and other NRCS cost share programs cannot be publicly disclosed. Without accurate historical data about past use of NRCS cost-sharing to implement state conservation standards, it is difficult to account for the role these funds may play in the future.

Comparison with Rule in Adjacent States

This comparison examines how surrounding states are addressing issues related to agricultural runoff and nutrient management planning and regulation and its relationship with farmland preservation activities. In general, the adjacent states do not use statewide performance standards specifically designed to address polluted runoff from agricultural sources. However, these states have various regulations and procedures in place to address many of the polluted runoff sources that this rule revision addresses. All four states use the NRCS 590 Nutrient Management Standard to steer their implementation of agricultural nutrient management, but none use it to the extent of Wisconsin's nonpoint program. All four states use the phosphorus index in some form but none use it in the same manner as NR 151 provides. For example, nutrient management strategies in Michigan are implemented as part of the state's Generally Accepted Agricultural and Management Practices ("GAAMPs"). Wisconsin's approach differs from the programs in adjacent states in that it has more detail in its state nutrient management standard and applies to more small and medium size farming operations than in other states. Also, in Wisconsin, pursuant to s. 281.16, Stats., cost-sharing must be made available to existing agricultural operations before the State may require compliance with the standards. Cost sharing is often tied to compliance responsibilities in adjacent states, but there are instances where farmers must meet standards other than the phosphorus index as part of regulatory programs.

Illinois

Using a different framework and programming, Illinois implements several standards similar to those adopted in Wisconsin. In addition to implementing a phosphorus index for large livestock operations, Illinois encourages voluntary participation in nutrient management for small and medium operations and only requires the use of the PI in areas draining to impaired waterbodies.

While Illinois has a statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements.

Iowa

Like Illinois, Iowa requires that manure management plans for livestock operations of 500 or more animal units be based on the phosphorus index. Iowa nutrient management planning includes a nitrogen leaching index and, like Wisconsin, includes restrictions on manure applications near surface water, groundwater conduits, and frozen soil. See Iowa's website at: http://www.iowadnr.gov/portals/idnr/uploads/afo/fs_desncriteria_medcafo.pdf

While Iowa operates a county-based statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements.

Michigan

Michigan relies on GAAMPs [see *Generally Accepted Agricultural and Management Practices for Manure Management and Utilization* (January 2012)] to support the Michigan Agriculture Environmental Assurance Program ("MAEAP"), which includes a compliance verification process that ensures nuisance protection to farmers under Michigan's Right to Farm law. GAAMPs covers standards similar to those in Wisconsin including standards for nutrient management. These standards are implemented as part of the state's right to farm law and its complaint investigation program. The state assesses problems identified through complaints, and farmers must take corrective action to earn nuisance protection under the right to farm law. Michigan uses a risk assessment formula to rank a field's risk for runoff and allows farms to use conservation practices to reduce the risk for those fields, thereby allowing farmers to apply manure in the winter.

While Michigan has a statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements

Minnesota

Minnesota requires a manure management plan for farms greater than 100 animal units if the farm requests a permit for one of several state programs. Like Wisconsin, the plans do not need to be submitted annually but need to be available upon request. Minnesota also utilizes setback from surface and groundwater features to reduce the risk of nonpoint contamination.

Under its feedlot program, Minnesota imposes mandatory requirements on about 25,000 registered feedlots. This program requires feedlot owners, ranging in size from small farms to large-scale commercial livestock operations, to "register with the MPCA, and meet the requirements for runoff discharge, manure application and storage, and processed wastewater."

While Minnesota has a statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements.

Summary of Factual Data and Analytical Methodologies

The Department participated in the Wisconsin USDA NRCS development of the 2015 version of the Wisconsin 590 Nutrient Management Standard with technical assistance from agronomists, farmers, UW scientists, and agency staff. In Wisconsin, the 590 Standard uses the current 2012 version of UW Pub. A2809 *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops* to determine the crop's nutrient needs and includes other restrictions required of NM plans developed for: DNR – Notice of Discharge or Wisconsin Pollution Discharge Elimination System permits for >1000 animal unit operations; Ordinances for manure storage or livestock siting; Department cost share or Farmland Preservation; DNR cost share; USDA cost share; or voluntary reasons. Currently about 2.9 million acres are implementing nutrient management plans, which leaves 6.27 million acres yet to have plans developed. The cost share rates of $7 per acre increased to $10 per acre due to the additional costs and spreading restrictions. With 6.27 million acres yet to have a NM plan, at $3 per acre, an additional $19 million estimate for the cost of full implementation or $1.9 million annually for the next ten years. If these landowners are offered 70% cost-sharing, they would be responsible for paying 30% of the $10 cost per acre or about $2.7 million annually.

Analysis and Supporting Documents Used to Determine Effect on Small Business or in Preparation of an Economic Impact Analysis

The Department worked with all federal and state agencies and stakeholders, including farmers, agronomists, and conservation staff to update the current federal standard, which resulted in the 2015-590 Nutrient Management Standard. Adopting the 2015-590 Standard was recommended based on the desire for one standard to apply to farms rather than varying federal and state standards. The changes from the 2005-590 to the 2015-590 were compared for cost of implementation.

Effects on Small Business

Most impacts of this rule will be on farmers, a great majority of whom qualify as "small businesses." The analysis of the impacts on farms takes into consideration the following factors:

- Most farmers will be insulated from some of the costs of implementation by the state's cost share requirement and the limited state funding available to provide cost-sharing.

- For farmers receiving farmland preservation tax credits, this rule provides farmers flexibility to minimize the financial impacts related to compliance (which range from $8 to $12 million state-wide), including a delay in the effective date for compliance with the 2011 DNR standards, the use of performance schedules, pursuit of cost-sharing for which they are eligible, use of a tax credit to offset some implementation costs, or if needed, withdrawal from the farmland preservation program to avoid unmanageable costs.

The rule changes will have small, but positive impacts on businesses other than farmers. Those businesses include nutrient management planners, soil testing laboratories, farm supply organizations, agricultural engineering practitioners, and contractors installing farm conservation practices. The *Final Regulatory Flexibility Analysis*, which will be filed with this rule, provides a more complete analysis of this issue.

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Place Where Comments Were Submitted

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Rule comments were accepted through February 9, 2017.

CHAPTER ATCP 50
SOIL AND WATER RESOURCE MANAGEMENT PROGRAM

SECTION 1. ATCP 50.04 (1) is amended to read:

(1) NONPOINT SOURCE POLLUTION CONTROL. A landowner shall implement conservation practices that achieve compliance with DNR performance standards under ss. NR

151.02 to 151.08, in effect on May 1, 2014. A nutrient management plan developed in accordance with sub. (3) may be used to demonstrate compliance with s. NR 151.04.

SECTION 2. ATCP 50.04 (3) (a) (Note) is repealed.

SECTION 3. ATCP 50.04 (3) (dm) 1. is amended to read:

1. Standard values specified in ~~NRCS Wisconsin Conservation Planning Technical Note WI-1 (November, 2008), companion document to~~ the current edition of *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops*, UWEX publication A2809 referenced in the NRCS technical guide standard 590.

SECTION 4. ATCP 50.04 (3) (e) and (Note) are amended to read:

(e) The plan shall comply with the NRCS technical guide nutrient management standard 590 (~~September, 2005~~ December, 2015) except for sections IV. D., IV. E., and VI., and shall also comply with the *Wisconsin Conservation Planning Technical Note WI-1* (~~November, 2008~~ February, 2016).

Note: The NRCS technical guide standard 590 (December, 2015) and the companion document *Wisconsin Conservation Planning Technical Note WI-1* (February, 2016) are on file with the department and the legislative reference bureau. Copies are available from a county land conservation department, a NRCS field office, the national NRCS website at: http://www.nrcs.usda.gov, the Wisconsin NRCS website at: www.wi.nrcs.usda.gov, or the department website at: https://datcp.wi.gov/Pages/Programs_Services/ATCP50.aspx. The NRCS technical guide standard 590 (December, 2015) includes the options for the development of a P management strategy when manure or organic by-products are applied during the crop rotation using either the Phosphorus Index (PI) or Soil Test Phosphorus Management Strategy. A person may obtain a checklist to gather information for a nutrient management plan by visiting the department's website at: https://datcp.wi.gov/Pages/Programs_Services/ATCP50.aspx.

SECTION 5. ATCP 50.04 (3) (f) is amended to read:

The plan may not recommend nutrient applications that exceed the amounts required to achieve applicable crop fertility levels recommended by the University of Wisconsin-Extension in the ~~2006~~ 2012 edition of *Nutrient Application Guidelines for Field, Vegetable and Fruit*

Crops, UWEX publication A2809, or in the latest subsequent edition of that publication if preferred by the landowner, unless the nutrient management planner can show that one or more of the following circumstances justifies the recommended application:

SECTION 6. ATCP 50.04 (3) (g) is amended to read:

(g) The plan shall be consistent with any nutrient management plan required under ch. NR 113, 204, or 214 if the landowner applies septage, municipal sludge, industrial waste, or industrial by-products to the land and in accordance with s. ATCP 65.22(6)(c). A landowner is not required to have a nutrient management plan under this subsection if the landowner applies primarily septage, municipal sludge, industrial waste, or industrial byproducts according to ch. NR 113, 204, or 214.

SECTION 7. ATCP 50.10 (title) is amended to read:

ATCP 50.10 County program; general.

SECTION 8. ATCP 50.16 (3) (a) (intro.), 2., 3. (Note), 4., and 4. (Note) are amended to read:

ATCP 50.16 (3) (a) (intro.) A county land conservation committee may enter into a written performance schedule with a landowner to obtain compliance with new standards under s. ATCP 50.04 if all of the following apply:

2. The landowner agrees in writing to ~~specific farm conservation practices needed to~~ achieve compliance with the standards required under sub. (1) according to a specific schedule for completing the work.

Note: While a performance schedule may ~~establish~~ extend a landowner's compliance under this section, a landowner may not meet other program requirements necessary to receive benefits such as farmland preservation tax credits. These other program requirements may include residency, minimum farm income, and continuity of claiming farmland preservation program tax credits.

4. The land conservation committee approves the performance schedule, including the ~~proposed~~ required practices and the time allowed to achieve compliance. The land conservation committee may establish shorter periods to achieve compliance that the 5 year maximum allowed under this subsection. A landowner is considered to be implementing their performance schedule if the landowner is making reasonable progress in installing the required practices and is taking other appropriate actions in the time frame identified by the land conservation committee in the performance schedule to achieve compliance.

Note: A county should exercise sound judgment ~~at critical junctures~~ in its monitoring of a farmer's conservation compliance, including its decision on the length of a performance schedule, and its decision on how and when to respond to changes in farmer compliance with applicable standards. The county may consider the following in exercising its discretion: extenuating circumstances, such as adverse weather conditions, that may affect a landowner's ability to comply; the nature and seriousness of the landowner's non-compliance; the degree to which the landowner has cooperated or taken actions to address concerns; the availability of technical or other assistance; and the consistency of treatment among farmers in the area. Before taking any compliance action, a county shall afford the landowner notice and reasonable opportunity to demonstrate compliance.

SECTION 9. ATCP 50.16 (3) (b) (intro.), 1., 2. and (note) are repealed.

SECTION 10. ATCP 50.16 (4) (a), (b), and (c) are amended to read:

(a) The county land conservation committee shall issue a certificate of compliance to a landowner claiming tax credits under s. 71.613, Stats., if the landowner meets the soil and water conservation standards as required by s. 91.80, Stats., and this section. The certificate shall be issued on ~~a~~ the form ~~approved~~ provided by the department.

(b) A certificate establishing a landowner's compliance with s. 91.80, Stats., and this section remains in effect and valid until the county land conservation committee issues a notice of noncompliance under sub. (6) or the ownership of the covered land is transferred.

(c) A certificate of compliance may be amended or modified to reflect changes in ownership or a landowner's status.

SECTION 11. ATCP 50.16 (6) (a) 5. (Note) is repealed.

SECTION 12. ATCP 50.16 (6) (b) (intro.) is amended to read:

(b) A county land conservation committee shall issue a notice of noncompliance under par. (a) on ~~a~~ the form provided by the department. Upon issuance of the notice, the landowner is ineligible to claim farmland preservation tax credits beginning in the year the notice of noncompliance is issued until such time as the county land conservation committee withdraws the notice of noncompliance under sub (d). The notice shall disclose all of the following:

SECTION 13. ATCP 50.16 (6) (c) 3. and 4. are created to read:

3. The landowner.

4. The department.

SECTION 14. ATCP 50.16 (6) (d) is amended to read:

(d) A county land conservation committee may, at any time, withdraw a notice of noncompliance issued under par. (a). The committee shall issue a notice of withdrawal on ~~a~~ the form approved by the department. The committee shall give notice of the withdrawal to any agency under par. (c) that received a copy of the notice of noncompliance. A notice of withdrawal issued under this paragraph demonstrates that a landowner has been found in compliance with this section.

SECTION 15. ATCP 50.32 (7) (a) is amended to read:

(a) To obtain a reimbursement payment under sub. (6) (a), a county land conservation committee shall file a reimbursement request on ~~a~~ the form provided by the department. A county may file a reimbursement request on or after ~~July 1~~ November 1 for costs incurred before ~~July 1~~ November 1. A county may file a second reimbursement request for costs ~~incurred on or after July 1~~ not covered by the first request. A county may file no more than 2 reimbursement

requests, and shall file all reimbursement requests by February 15 of the year following the grant year.

SECTION 16. ATCP 50.40 (3) (b) 13. is amended to read:

13. Bring a ~~landowner~~ permittee into compliance with standards required under ~~the~~ a ~~landowner's~~ WPDES permit under chs. 281 and 283, Stats.

SECTION 17. ATCP 50.40 (11) (b) (4) and (Note) are created to read:

4. A person with the appropriate level of NRCS job approval authority.

Note: See Note under sub. (1)(b).

SECTION 18. ATCP 50.42 (2) (g) is amended to read:

(g) For nutrient management ~~and pesticide management~~, $~~7~~10 per acre per year.

SECTION 19. ATCP 50.46 (3) (title) is amended to read:

(3) CONSERVATION ENGINEERING PRACTITIONER; INITIAL CERTIFICATION AND RECERTIFICATION.

SECTION 20. ATCP 50.46 (3) (c) (intro.) and 1. through 4. is created to read:

(c) Certifications issued under this section are for a term of three years and automatically renew unless any of the following occur:

1. The practitioner is not employed by an entity with a supervisor who is authorized to sign the certification.
2. The practitioner fails to meet the education requirements.
3. The practitioner has failed to provide or update information required for certification under par. (b).
4. The practitioner has rescinded the signature on the certification or otherwise indicates an intent to surrender the certification.

SECTION 21. ATCP 50.48 (1) (a) is amended to read:

(a) Compliance with the NRCS technical guide standard 590.

SECTION 22. ATCP 50.48 (2) (a) 2., 3., and 4. are amended to read:

2. Recognized as a certified crop ~~advisor~~ adviser or professional agronomist by the American society of agronomy, Wisconsin certified crop ~~advisors~~ advisers board.

3. Registered as a soil scientist by the soil science society of America ~~or as a professional agronomist by the American society of agronomy~~.

4. The holder of other credentials that the department deems equivalent to those specified under subds. 1. To 3. A landowner is presumptively qualified to prepare a nutrient management plan for his or her farm, but not for others, if the landowner completes a department-approved training course that results in a nutrient management plan in compliance with s. ATCP 50.04 (3) and the course instructor approves the landowner's first annual plan. The landowner shall complete a department-approved training course at least once every 4 years to maintain his or her presumptive qualification. The course instructor is not required to hold credentials listed in sub. 1-3, but he or she must be knowledgeable and competent in accordance with sub. (1).

SECTION 23. ATCP 50.48 (2) 4. (Note) is repealed.

SECTION 24. ATCP 50.48 (6) is amended to read:

(6) RECORDS. A qualified nutrient management planner shall keep copies of all nutrient management plans that the qualified nutrient management planner prepares or approves for funding under s. 281.65 or 281.66, Stats., or this chapter. The qualified nutrient management planner shall retain the records for at least 4 years, and shall make them available for inspection and copying by the department or its agent upon request. The qualified nutrient management planner under ATCP 50.48(3) shall complete the nutrient management checklist form provided by the department. The qualified nutrient management planner shall have reasonable

documentation to substantiate each checklist response. The qualified nutrient management planner shall provide it to the department or its agent upon request.

SECTION 25. ATCP 50.50 (2) (d) (intro.) and (Note) are amended to read:

(d) The soil tests, test methods, and nitrogen estimation methods used by the laboratory. The laboratory shall be capable of performing the following tests according to methods prescribed by the University of Wisconsin-Extension in Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin, UWEX Publication A2809 (2012) or subsequent versions, and by the University of Wisconsin-Madison soil science department in *Wisconsin Procedures for Soil Testing, Plant Analysis and Feed & Forage Analysis, Soil Fertility Series* (~~March, 2012~~ October, 2013) or subsequent versions, and shall be capable of estimating nitrogen levels based on those tests:

Note: Copies of the *Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin.* UWEX Publication A2809 (2012) and the *Wisconsin Procedures for Soil Testing, Plant Analysis and Feed & Forage Analysis, Soil Fertility Series* (~~March, 2012~~ October, 2013) are on file at the department and legislative reference bureau. To obtain a copy of the A2809, see s. ATCP 50.04 (3) (f) 4. (note). Copies of the Wisconsin Procedures publication are available at the University of Wisconsin website at: http://uwlab.soils.wisc.edu/lab-procedures.

SECTION 26. ATCP 50.50 (2) (g) (Note) is repealed.

~~**Note:** A person may obtain a copy of the soil test laboratory certification form by visiting the department website at: http://datcp.wi.gov/ATCP50 or by calling (608) 224-4622.~~

SECTION 27. ATCP 50.50 (8) (c) is amended to read:

(c) The laboratory is capable of estimating total and available nutrient levels based on the manure tests under par. (b) and the availability percentages shown in ~~Table~~ *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops in Wisconsin*, UWEX publication A2809 (2012) ~~3 of part III of the Wisconsin conservation planning technical note WI-1~~

~~(September, 2007), a companion document to the NRCS technical guide nutrient management standard 590~~.

SECTION 28. ATCP 50.50 (8) (c) (Note) is repealed and recreated to read:

Note: To obtain a copy of A2809, see s. ATCP 50.04 (3) (f) 4. (Note).

SECTION 29. ATCP 50.50 (9) is created to read:

(9) CONFLICT OF INTEREST. For the purpose of complying with s. ATCP 50.04 (3) a privately owned laboratory certified under this section shall not perform soil test analysis on cropland managed or owned by a person managing or having a substantial financial interest in the laboratory.

SECTION 30. ATCP 50.54 (2) (b) (intro.) is amended to read:

(b) Paragraph (a) does not apply to a nutrient management plan ~~required~~ under s. ATCP 50.04 (3) when required by any of the following:

SECTION 31. ATCP 50.56 (2) (g) is amended to read:

(g) Provisions, if any, for monitoring the adequacy of manure storage systems, including the ~~adequacy of related nutrient management practices~~ annual submission of a nutrient management plan that complies with s. ATCP 50.04 (3).

SECTION 32. ATCP 50.56 (3) (b) (1) (Note) is repealed.

SECTION 33. ATCP 50.62 (3) (d) is amended to read:

(d) Any manure storage system costs related to an animal feeding operation if all of the manure from that operation could be applied to land according to the NRCS technical guide nutrient management standard 590 (~~September, 2005~~ December, 2015) without causing or aggravating nonattainment of water quality standards.

SECTION 34. ATCP 50.62 (5) (a) and (c) are amended to read:

(a) The system capacity is necessary based on the farm's inability to comply with the farm's nutrient management plan to store the manure produced by the animal feeding operation over a normal period of 30 to 365 days~~, as verified by a nutrient management plan or an operation and maintenance plan~~.

(c) If the manure storage facility is designed to be emptied annually or semi-annually, manure from the system must be applied to non-frozen soils in compliance with a nutrient management plan under s. ATCP 50.04 (3) ~~is incorporated into the soil within 3 days after it is applied to land~~.

SECTION 35. ATCP 50.66 (3) (a) 1. is amended to read:

1. NRCS technical guide trails and walkways standard 575 (~~October, 2014~~ April, 2016).

SECTION 36. ATCP 50.67 (3) (a) and (b) is amended to read:

(a) NRCS technical guide contour farming standard 330 (~~November, 2008~~ March, 2016).

(b) NRCS technical guide obstruction removal standard 500 (~~December, 2010~~ July, 2016).

SECTION 37. ATCP 50.69 (4) (a) 1., 3., 4., 5., and 7. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

3. NRCS technical guide field border standard 386 (~~November, 2009~~ January, 2017).

4. NRCS technical guide access control standard 472 (~~October, 2008~~ April, 2016).

5. NRCS technical guide mulching standard 484 (~~March, 2013~~ June, 2016).

7. NRCS technical guide karst sinkhole treatment standard 527 (~~December, 2010~~ March, 2016).

SECTION 38. ATCP 50.70 (4) (b) 1., 2., 4., and 6. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

2. NRCS technical guide diversion standard 362 (~~December, 2010~~ August, 2016).

4. NRCS technical guide grassed waterway standard 412 (~~August, 2015~~ July, 2016).

6. NRCS technical guide obstruction removal standard 500 (~~December, 2010~~ July, 2016).

SECTION 39. ATCP 50.705 (5) (a) 5., 6., and 7. are amended to read:

5. NRCS technical guide wetland restoration standard 657 (~~September, 2000~~ September, 2016).

6. NRCS technical guide nutrient management standard 590 (~~September, 2005~~ December, 2015).

7. NRCS technical guide diversion standard 362 (~~December, 2010~~ August, 2016).

SECTION 40. ATCP 50.71 (3) (b) 2. and 3. are amended to read:

2. NRCS technical guide windbreak/shelterbelt establishment standard 380 (~~November, 2011~~ October, 2016).

3. NRCS technical guide access control standard 472 (~~October, 2008~~ April, 2016).

SECTION 41. ATCP 50.72 (3) (a) 1., 3., 4., 5., and 6. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

3. NRCS technical guide field border standard 386 (~~November, 2009~~ January, 2017).

4. NRCS technical guide filter strip standard 393 (~~August, 2015~~ January, 2017).

5. NRCS technical guide access control standard 472 (~~October, 2008~~ April, 2016).

6. NRCS technical guide mulching standard 484 (~~March, 2013~~ June, 2016).

SECTION 42. ATCP 50.73 (3) (d) 1., 2., 3., 5., 6., 7., 9., and 12. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

2. NRCS technical guide sediment basin standards 350 (~~April, 2014~~ August, 2016).

3. NRCS technical guide diversion standard 362 (~~December, 2010~~ August, 2016).

5. NRCS technical guide obstruction removal standard 500 (~~December, 2010~~ July, 2016).

6. NRCS technical guide grade stabilization structure standard 410 (~~January, 2010~~ August, 2016).

7. NRCS technical guide grassed waterway standard 412 (~~August, 2015~~ July, 2016).

9. NRCS technical guide mulching standard 484 (~~March, 2013~~ June, 2016).

12. NRCS technical guide water and sediment control basin standard 638 (~~January, 2011~~ August, 2016).

SECTION 43. ATCP 50.75 (4) (a) 2. is amended to read:

2. NRCS technical guide access control standard 472 (~~October, 2008~~ April, 2016).

SECTION 44. ATCP 50.76 (5) (a) 4. and 7. is amended to read:

4. NRCS technical guide livestock pipeline standard 516 (~~October, 2012~~ December, 2016).

7. NRCS technical guide pumping plant standard 533 (~~July, 2011~~ July, 2016).

SECTION 45. ATCP 50.77 (4) (a) 5. and 7. are amended to read:

5. NRCS technical guide nutrient management standard 590 (~~September, 2005~~ December, 2015).

7. NRCS technical guide constructed wetland standard 656 (~~September, 2012~~ December, 2016).

SECTION 46. ATCP 50.78 (3) (a) and (Note) is amended to read:

(a) The nutrient management practice complies with NRCS technical guide nutrient management standard 590 (~~September, 2005~~ December, 2015).

Note: The NRCS technical guide nutrient management standard 590 (~~September, 2005~~) can be obtained by visiting the department website at: https://datcp.wi.gov/Pages/Programs_Services/ATCP50.aspx.

SECTION 47. ATCP 50.80 (3) (a) 1., 3., 7., and 8. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

3. NRCS technical guide access control standard 472 (~~October, 2008~~ April, 2016).

7. Guidelines specified in "Pastures for Profit: A Guide to Rotational Grazing," published by the University of Wisconsin-Extension (~~2002~~ 2014).

8. NRCS technical guide trails and walkways standard 575 (~~October, 2014~~ April, 2016).

SECTION 48. ATCP 50.82 (4) (c) 1. and 2. is amended to read:

1. NRCS technical guide residue and tillage management-no till/strip till/direct seed standard 329 (January, ~~2012~~ 2017).

2. NRCS technical guide residue and tillage management-mulch till standard 345 (January, ~~2012~~ 2017).

SECTION 49. ATCP 50.83 (3) (a) 1., 3., 4., 5., and 6. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

3. NRCS technical guide field border standard 386 (~~November, 2009~~ January, 2017).

4. NRCS technical guide filter strip standard 393 (~~August, 2015~~ January, 2017).

5. NRCS technical guide access control standard 472 (~~October, 2008~~ April, 2016).

6. NRCS technical guide mulching standard 484 (~~March, 2013~~ June, 2016).

SECTION 50. ATCP 50.84 (5) (a) is amended to read:

ATCP 50.84(5)(a) The roof complies with NRCS technical guide roofs and covers standard 367 (~~October, 2011~~ April, 2016).

SECTION 51. ATCP 50.86 (4) (b) 1. and 2. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

2. NRCS technical guide sediment basin standards 350 (~~April, 2014~~ August, 2016).

SECTION 52. ATCP 50.87 (4) (a) 1., 2., and 3. are amended to read:

1. NRCS technical guide karst sinkhole treatment standard 527 (~~December, 2010~~ March, 2016).

2. NRCS technical guide diversion standard 362 (~~December, 2010~~ August, 2016).

3. NRCS technical guide grassed waterway standard 412 (~~August, 2015~~ July, 2016).

SECTION 53. ATCP 50.88 (3) (a) 1. is amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

SECTION 54. ATCP 50.885 (4) (a) 2. is amended to read:

2. NRCS technical guide streambank and shoreline protection standard 580 (~~March, 2015~~ August, 2013).

SECTION 55. ATCP 50.885 (4) (a) 2. (Note) is repealed.

SECTION 56. ATCP 50.89 (3) (b) 1. and 2. are amended to read:

1. NRCS technical guide obstruction removal standard 500 (~~December, 2010~~ July, 2016).

2. NRCS technical guide stripcropping standard 585 (~~April, 2009~~ June, 2016).

SECTION 57. ATCP 50.91 (3) (b) 1., 2., 4., and 8. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

2. NRCS technical guide grassed waterway standard 412 (~~August, 2015~~ July, 2016).

4. NRCS technical guide obstruction removal standard 500 (~~December, 2010~~ July, 2016).

8. NRCS technical guide water and sediment control basin standard 638 (~~January, 2011~~ August, 2016).

SECTION 58. ATCP 50.94 (3) (a) 1., 3., and 4. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

3. NRCS technical guide access control standard 472 (~~October, 2008~~ April, 2016).

4. NRCS technical guide mulching standard 484 (~~March, 2013~~ June, 2016).

SECTION 59. ATCP 50.95 (3) (a) 1. and 3. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

3. NRCS technical guide water and sediment control basin standard 638 (~~January, 2011~~ August, 2016).

SECTION 60. ATCP 50.96 (3) (b) 1., 3., 4., and 5. are amended to read:

1. NRCS technical guide critical area planting standard 342 (~~January, 2013~~ August, 2016).

3. NRCS technical guide grassed waterway standard 412 (~~August, 2015~~ July, 2016).

4. NRCS technical guide mulching standard 484 (~~March, 2013~~ June, 2016).

5. NRCS technical guide obstruction removal standard 500 (~~December, 2010~~ July, 2016).

SECTION 61. ATCP 50.98 (3) (a) is amended to read:

(a) NRCS technical guide wetland restoration standard 657 (September, ~~2000~~ 2016).

SECTION 62. EFFECTIVE DATE: This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register, as provided under s. 227.22 (2) (intro).

Dated this _____day of _____, 2017.

WISCONSIN DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION

By _____
Ben Brancel, Secretary

Wisconsin Department of Agriculture, Trade and Consumer Protection

Final Environmental Assessment

Rule Subject:	**Soil and Water Resource Management Program**
Administrative Code Reference:	**ATCP 50**
Rules Clearinghouse #:	**16-083**
DATCP Docket #:	**15-R-13**

This environmental assessment is required by Wis. Admin. Code ATCP 3.02.

Nature and Purpose of this Rule

This rule modifies the Soil and Water Resource Management ("SWRM") Program under Chapter ATCP 50, for the primary purposes of incorporating the changes to the United States Department of Agriculture's ("USDA") Natural Resources Conservation Service ("NRCS") 2015 version of the 590 Nutrient Management Standard ("2015-590 NM Standard") and implementing ch. NR 151 adopted by the Department of Natural Resources ("DNR") in 2011 ("2011 DNR standards").[1] The agricultural conservation standards for nutrient management ("NM") in Subchapter II, clarification of requirements for farmland preservation conservation compliance in Subchapter III, a cost share rate adjustment in Subchapter V, NM requirements in local regulations in Subchapter VII, and the NM technical and other standards for practices cost shared with state funds in Subchapter VIII most directly impact this Environmental Assessment. Farmers and others may benefit from various rule changes intended to improve NM implementation and resource protection.

Foreseeable Environmental Effects

The environmental effects of this rule revision are positive. By incorporating the 2015-590 NM Standard, this rule will supply additional provisions for soil and water conservation and protection, including:

- Prohibiting nutrient applications within 50' of all direct conduits to groundwater (previously only applied to wells) where only grazing and a limited amount of corn starter fertilizer may be applied.

- Prohibiting applications of manure within 100' of a non-community well, which includes schools, restaurants, churches, and within 1000' of a community well, unless the manure is treated to reduce pathogen content.

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[1] DNR's final rulemaking order of September 24, 2010, Administrative Rule Number WT-14-08, as well as the revised fiscal estimate is available at https://health.wisconsin.gov/admrules/public/Rmo?nRmoId=1703

- Prohibiting winter nutrient applications within 300' of all direct conduits to groundwater, unless manure is directly deposited by gleaning or pasturing animals. This setback increased from the 200' setback in the 2005-590 NM Standard.

- Prohibiting liquid manure application in February or March on DNR Well Compensation Areas, or on fields with Silurian Dolomite bedrock within 5' of the surface.

- Limiting manure nitrogen ("N") applications in late summer or fall using the lower application rate of either the current 2012 version of UW Pub. A2809 or 2015-590 NM Standard available N per acre rate for the situation on sites vulnerable to N leaching high permeability ("P") soils, or rock ("R") soils with < 20 inches to bedrock, or wet ("W") soils with < 12 inches to apparent water table ("PRW Soils").

- Limiting winter manure applications when frozen or snow-covered soils prevent effective incorporation. The NM plan must limit these applications when slopes are > 6% and if fields have concentrated flow areas using two crop management practices listed in the winter application section of the 2015-590 NM Standard.

- Prohibiting manure applications to areas locally delineated by a Land Conservation Committee as areas contributing runoff to direct conduits to groundwater, unless manure is substantially buried within 24 hours of application.

- Late summer or fall commercial N fertilizer applications are limited in regard to areas within 1,000 feet of a community well, 5 feet or less over bedrock, sites vulnerable to N leaching high P soils, R soils with < 20 inches to bedrock, or W soils with < 12 inches to apparent water table; rates needed for establishment of fall seeded crops or to meet UWEX Pub. A2809 with a blended fertilizer. The fall N rate was increased from 30 to 36 lbs. of N per acre to match common blended fertilizers if other nutrients are needed.

Other provisions in the rule were adjusted to clarify processes or procedures for implementing the nutrient management program. In particular, a rule revision clarifying that the alternative related to Wis. Admin. Code NR 151.04, the phosphorus index ("PI"), is a nutrient management plan developed in accordance with the nutrient management provisions in Wis. Admin. Code ATCP 50.04(3). Meaning, the 2005 and 2015-590 NM Standards provided the PI alternative with the soil test P management strategy.

The rule revisions increase the flat-rate cost-share rate for nutrient management from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions. Most farmers must receive an offer of cost-sharing to secure compliance. Some farmers may voluntarily choose to comply with the new standards. Some farmers may be required to implement these new standards without cost-sharing to meet local and state permits or as a condition for collecting Farmland Preservation Program ("FPP") tax credits. Over time, the level of state and federal cost-share funds will be the critical factor in determining the extent to which the 2011 DNR performance standards are implemented on farms, and the degree of environmental benefits attained.

Persons or Groups That May Be Affected by the Rule

Farmers: This rule updates the nutrient management standard that applies to all farms. Most farmers are not required to implement these standards unless they receive an offer of cost-sharing of at least 70 percent (90 percent in the case of economic hardship). This rule will update conservation compliance requirements for FPP participants and the cost-shared rate provided for this practice.

Non-Farm Landowners: This rule revision does not impact non-farm landowners as the revisions address on-farm nutrient management activities and related programming.

County Conservation Programs and Cooperators: This rule makes changes to the SWRM program, which will impact county conservation programs and cooperators that receive department funding. Counties are primarily responsible for implementation of farm conservation standards and practices including nutrient management. This rule updates the State nutrient management standard and the cost share rate associated with this conservation practice. In Wisconsin, a NM plan may be required if the landowner is subject to a county or local ordinance such as ordinances for manure storage or livestock siting. The Department's rule revision clarifies that a NM plan, and subsequent annual submissions for local regulation, mean NM plans to be developed according to Wis. Admin. Code ATCP 50.04(3). Therefore, should this rule revision be adopted, all NM plans developed for county or local ordinances must comply with the 2015-590 NM Standard after the effective date of this rule.

Conservation and Farm Related Businesses: Changes in the rule will marginally increase the demand for entities that provide services to farmers. Farm supply and service organizations may provide nutrient management planning services, crop consulting, fertilizer sales, soil testing, engineering, and other services purchased by landowners.

Rural Residents: Rural residents benefit from updating the nutrient management standard and the nutrient application requirements. Neighboring landowners with properties located "downstream" of lands with nutrient and sediment delivery runoff problems stand to benefit. Certain measures contained in the 2015-590 NM Standard will protect water quality and assist in safeguarding drinking water wells that serve neighboring landowners and communities.

General Public: The general public will benefit from this rule as a result of the consumer, human health and environmental protections offered through proper use of crop nutrients. It will help ensure that manure, an important crop nutrient, is applied in a cost effective and environmentally sound manner. It will help limit long-term nutrient management costs. It will reduce fish kill and well contamination risks.

Significant Economic, Social or Cultural Effects

Economic Effects

The economic impact of the rule is moderate. This assessment accounts for the group most significantly impacted by the rule, farmers, and takes into consideration the implications of the 2015-590 NM Standard for farmers participating in cost share programs and the Farmland Preservation Program. This rule is expected to have a minimal, but positive, effect on businesses that work with farmers such as nutrient management planners. The *Final Regulatory Flexibility Analysis* contains a detailed analysis of these considerations.

Implementing a nutrient management plan that complies with all aspects of the 2015-590 NM Standard contributes to cleaner surface and ground water, which produces tangible economic benefits. Among other benefits, improvements in water quality protect the property values of waterfront homeowners, reduce treatment costs for drinking water, enhance recreational opportunities, and protect the scenic rural landscape, all of which are essential to tourism.

Social and Cultural Effects

On balance, the rule will produce positive social effects. Through the adoption of nutrient management, farmers take positive actions to protect water quality and reduce soil erosion. These actions enhance public acceptance of farming, and strengthen farmers' credibility as environmental stewards. In rural communities, these actions are appreciated by farm neighbors who are concerned about protecting groundwater used as a source of drinking water. Systematic efforts to install conservation practices minimize some of the concerns of the public who worry that farmers are not doing their part to protect the environment.

Controversial Public Issues

The Department has not encountered any major public controversies related to this rule, and does not anticipate such controversies going forward. The 2015-590 NM Standard was revised through an intensive, two-year long process. In 2013, a revision team was formed by NRCS to provide their technical expertise regarding needed revisions to the 2005 version of the NRCS 590 Nutrient Management Standard. A draft copy of the proposed 2015-590 NM Standard revision was released twice for public comment in 2015. Numerous comments were received and the team considered each one individually and made adjustments. Thus, the Department presumes that any controversies regarding the 2015-590 NM Standard have already been settled.

During the hearing and comments process, the Department anticipates receiving additional public feedback on provisions of the 2015-590 NM Standard, changes in the cost-sharing rate, and record submission for nutrient management plans.

Alternatives to this Rule

No Action

Not promulgating the rule would cause the Department to be inconsistent with State statutes. The Department is required to promulgate rules in Wis. Admin. Code ch. ATCP 50 prescribing conservation practices to meet Wis. Admin. Code ch. NR 151 performance standards and to specify a process for the development and distribution of technical standards for the practices (Wis. Stat. § 281.16 (3) (b)). The Department is required to establish, by rule, a nutrient management program coordinating with state and federal agencies (see Wis. Stat. § 92.05 (3) (k)). The Department must develop applicable land and water conservation standards for owners claiming farmland preservation tax credits (Wis. Stat. § 91.80).

This rule is designed to clarify and modernize existing rules and ensure regulatory consistency between the state and federal standard. If the Department does not adopt this rule, there will continue to be inconsistencies between nutrient planning requirements leading to confusion. In addition, changes clarify existing requirements and provide options for more flexibility will not be enacted. Provisions being established to protect human health and the environment, such as new mechanical manure application requirements creating a 50 feet setback in spring, summer, fall, and 300 feet setbacks in winter, around conduits to groundwater will not be enacted, which could lead to unsafe drinking water. Implementing the rule will benefit business, the general public, and the environment.

Modify Rule Provisions

The Department could modify the rule provisions. However, the Department developed this rule in consultation with government agencies, organizations, and industry groups that have supported implementation of the 2011 DNR performance standards and other provisions of this rule. This rule includes specific accommodations to address the needs of the most impacted groups, and represents a fair balance between business concerns and the need for natural resource protection. The final version of the rule incorporates non-substantive changes suggested by the Legislative Council Rules Clearinghouse and current versions of technical standards. Comments received during public hearings did not require changes to Wis. Admin. Code ch. ATCP 50 or the 2015-590 NM Standard.

Additional Measures to Mitigate Adverse Environmental Effects

The Department does not anticipate any adverse environmental effects as a result of this rule. Therefore, no additional measures will be needed to mitigate any adverse environmental effects.

Conclusion

This rule will provide the technical standards required to implement the 2011 DNR performance standards and make improvements in Department programs, which will assist in facilitating the implementation of these standards. Overall, this rule will have a positive effect on the environment. However, implementation of conservation practices will depend on available cost-sharing. There are no preferable alternatives to this rule. This rule is not a "major action significantly affecting the quality of the environment," for purposes of Wis. Stat. § 1.11. No environmental impact statement is required under Wis. Stat. § 1.11, or Wis. Admin. Code ch. ATCP 3.

Signed this 11th day of MAY, 2017.

WISCONSIN DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION

By _____
John Petty, Administrator
Division of Agricultural Resource Management

Wisconsin Department of Agriculture,
Trade and Consumer Protection

Final Regulatory Flexibility Analysis

Rule Subject:	Soil and Water Resource Management Program
Adm. Code Reference:	ATCP 50
Rules Clearinghouse #:	16-083
Department Docket #:	15-R-13

Rule Description

General

This rule will modify the Soil and Water Resource Management ("SWRM") Program under ch. ATCP 50, primarily for the purpose of incorporating the changes to the United States Department of Agriculture's ("USDA") Natural Resources Conservation Service ("NRCS") 2015 version of the 590 Nutrient Management Standard ("2015-590 NM Standard") for the purposes of implementing ch. NR 151 adopted by the Department of Natural Resources ("DNR") in 2011 ("2011 DNR standards").[1] The most significant changes to the rule that impact this analysis center on the agricultural conservation standards for nutrient management ("NM") in Subchapters II, clarification of requirements for farmland preservation conservation compliance in Subchapter III, a cost share rate adjustment in Subchapter V, NM requirements in local regulations in Subchapter VII, and the NM technical and other standards for practices cost shared with state funds in Subchapter VIII. Farmers and others may benefit from various rule changes intended to improve NM implementation and resource protection.

Small Businesses Affected

The moderate impacts of this rule will mostly affect farmers, a great majority of whom qualify as "small businesses." This rule provides technical runoff control standards for farmers to implement the water quality performance standards required by the 2011 DNR promulgated standards. Most farmers will be insulated from some of the costs of implementation, because of the state's cost share requirement and the limited availability of state funding to provide cost-sharing. For farmers receiving farmland preservation program ("FPP") tax credits, this rule provides farmers the flexibility to minimize financial impacts of compliance, including the option of discontinuing collection of a tax credit as a last recourse to avoid compliance responsibilities. Rule changes will also affect businesses other than farmers including NM planners, soil testing laboratories, farm supply organizations, agricultural engineering practitioners, and contractors installing farm conservation practices. The rule will impact these businesses to a much smaller degree, and with positive impacts.

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[1] DNR's final rulemaking order of September 24, 2010, Administrative Rule Number WT-14-08, as well as revised fiscal estimate is available at https://health.wisconsin.gov/admrules/public/Rmo?nRmoId=1703

To reach its conclusion regarding agricultural NM impacts on farmers and non-farmers, the Department assessed the costs associated with the changes to the 2015-590 NM Standard as compared to the 2005-590 NM Standard, while also identifying aspects of the 2015-590 NM Standard that are likely to have no cost increases to farmers or that may reduce the cost of conducting NM on their farms. The Department concludes that this rule will create a moderate impact on farmers and other businesses.

Department Impact Analysis

Chapter 92.05(3)(k) charges the Department with improving agricultural NM, making rules consistent with Wis. Stat. § 281.16(3), and providing financial incentives, education, and compliance assistance to agricultural landowners. Implementing NM practices can improve farm profitability, reduce excess nutrient applications to cropland, and reduce water quality impacts. The Wisconsin USDA NRCS developed the 2015 version of the Wisconsin 590 Nutrient Management Standard with technical assistance from agronomists, farmers, UW scientists, and agency staff. In Wisconsin, the 590 Standard uses the current 2012 version of UW Pub. A2809 *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops* to determine the crop's nutrient needs and includes other restrictions required of NM plans developed for: DNR – Notice of Discharge or Wisconsin Pollution Discharge Elimination System permits for >1000 animal unit operations, Ordinances for manure storage or livestock siting, Department cost share or Farmland Preservation, DNR cost share, USDA cost share, or voluntary reasons.

The Department calculates an additional $3/acre to comply with the 2015-590 NM Standard may be appropriate for those farms that have not yet developed a NM plan. The costs for soil testing and labor have increased, and additional restrictions have been added to the 2015-590 NM Standard that may require more land to apply manure compared to the 2005-590 NM Standard. The reasons for needing more land to apply manure are due to the additional spreading restrictions listed below.

- Prohibiting nutrient applications within 50' of all direct conduits to groundwater where only grazing and a limited amount of corn starter fertilizer may be applied. This change was added to all direct conduits to groundwater, not just wells. However the 2015-590 NM Standard deletes a 200' incorporation requirement for non-winter nutrient applications, allowing farmers to use less erosive tillage practices.

- Prohibiting applications of manure within 100' of a non-community well which includes schools, restaurants, churches, and within 1000' of a community well unless the manure is treated to reduce pathogen content. Community wells cover approximately 30,000 acres of cropland. Non-community wells are not mapped and cropland acreage is estimated to be less than 7,000 acres.

- Prohibiting winter nutrient applications within 300' of all direct conduits to groundwater, unless manure is directly deposited by gleaning or pasturing animals. This setback increased 100' from the 200' setback in the 2005-590 NM Standard.

- Prohibiting liquid manure application in February or March on DNR Well Compensation Areas, or on fields with Silurian dolomite bedrock within 5' of the surface. DNR Well Compensation Areas cover about 6,000 acres of cropland and Silurian dolomite bedrock within 5' of the surface covers 83,000 acres of cropland.

- Limiting manure nitrogen (N) applications in late summer or fall using the lower application rate of either the current 2012 version of UW Pub. A2809 or 2015-590 NM Standard available N per acre rate for the situation on sites vulnerable to N leaching high permeability ("P") soils, or rock ("R") soils with < 20 inches to bedrock, or wet ("W") soils with < 12 inches to apparent water table ("PRW Soils"). N rates of 90 or 120 lbs. N per acre have not changed. The rates depend on the crop, manure dry matter, and soil temperature. Wisconsin P soils cover 1.3 million cropland acres, R soils cover 235,000 cropland acres, and W soils cover 1.5 million cropland acres.

- Limiting winter manure applications when frozen or snow-covered soils prevent effective incorporation. The NM plan must limit these applications when slopes are > 6% and if fields have concentrated flow areas using 2 practices listed in the winter application section of the 2015-590 NM Standard. These requirements do not apply to manure deposited through winter gleaning or pastoring. Farmers will need more application acreage if they choose these practice options as either or both of the required practices for each field: Apply manure in intermittent strips on no more than 50% of field; Reduce manure application rate to 3,500 gal., or 30 lbs. P2O5, whichever is less; No manure application within 200 feet of all concentrated flow channels; Fall tillage is on the contour and slopes are lower than 6%. Wisconsin has 3.1 million cropland acres with slopes greater than 6%.

- Prohibiting manure applications to areas locally delineated by the Land Conservation Committee as areas contributing runoff to direct conduits to groundwater, unless manure is substantially buried within 24 hours of application. This provision now requires incorporation to reduce the risk of runoff being intercepted by the conduit to groundwater in all seasons. Therefore, winter applications are prohibited, because the manure cannot be effectively incorporated if the ground is frozen. Farmers may need more application acreage if the field's soil loss will be too high with the required manure incorporation or if crops are no-tilled. A conservation plan, signed by the land operator and approved by the county Land Conservation Committee, will be needed for designating winter spreading restrictions other than those specifically listed in this standard.

Not all the changes to the 2015-590 NM Standard will require more land or add costs:

- Nutrients cannot be applied within 8' around an irrigation well making this prohibition consistent with NR 812 well code. The 2015-590 NM Standard clarifies that an irrigation well does not require a 50' nutrient prohibition and incorporation of manure within 200' of the well.

- New options are now available to control ephemeral erosion, including contours, reduced tillage, adjusting the crop rotation, or implementing other practices to control ephemeral

erosion. Existing options include using contour strips, contour buffer strips, filter strips, > 30% crop residue after planting, and establishing fall cover crops.

- Late summer or fall commercial N fertilizer applications are limited on: areas within 1,000 feet of a community well; 5 feet or less over bedrock; sites vulnerable to N leaching high P soils, or R soils with < 20 inches to bedrock, or W soils with < 12 inches to apparent water table; to rates needed for establishment of fall seeded crops or to meet UWEX Pub. A2809 with a blended fertilizer. The fall N rate was increased from 30 to 36 lbs. of N per acre to match common blended fertilizers if other nutrients are needed. The 2015-590 NM Standard is likely to decrease the amount of N fertilizer that can be applied in the fall; but, the applications can be made in the spring. Wisconsin has approximately 1.8 million cropland acres with bedrock within 5' of the surface.

- An additional option for use on P soils, when commercial N is applied in the spring and summer has been added. These in-season applications must follow the UWEX Pub. A2809 crop N rate guidelines and apply one of the following strategies: a split or delayed N application to apply a majority of crop N requirement after crop establishment, use a nitrification inhibitor with ammonium forms of N, or, use slow and controlled release fertilizers for a majority of the crop N requirement applied near the time of planting.

- More options for mechanical applications of manure or organic by-products in the winter in the surface water quality management area ("SWQMA") within 1000' of lakes/ponds or 300' of rivers. A new option allows for no-till silage if nutrient applications are made within 7 days of planting. Nutrient applications in the spring, summer, and fall limit mechanical applications to 12,000 gals/acre of unincorporated liquid manure with 11% or less dry matter where subsurface drainage is present or within the SWQMA. This will be easier to implement with a single manure rate with more gallons per acre.

Other provisions in the rule were adjusted to clarify processes or procedures for implementing the nutrient management program:

- Clarifies that the alternative related to s. NR 151.04, the phosphorus index ("PI"), is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3) and provides that in accordance with both the 2005-590 NM Standard and 2015-590 NM Standard the alternative to the PI is complying with the soil test P management strategy.

- Clarifies the Farmland Preservation section requirements seeking voluntary compliance with the rule changes to the maximum extent feasible, consistent with the Department's past approach. Farmers who wish to continue to participate in this program may be required to comply with new and modified standards without receiving cost-sharing.

- Clarifies that a cost-share grant may not be used to bring a permittee into compliance with standards under Wisconsin Pollution Discharge Elimination System permit under chs. 281 and 283, Stats.

- Clarifies the changes from the 2005-590 NM Standard to the 2015-590 NM Standard increases the associated cost sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- Enables the Department to simplify the process for cancelling a conservation engineer's certification if agreed to in writing. The rule also provides for a person with the appropriate level of NRCS job approval authority to certify in writing that the practice complies with this rule.

- Requires a qualified NM planner to complete a NM checklist form, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent.

- Clarifies a NM plan, and subsequent annual submissions for local regulation means NM plans developed according to s. ATCP 50.04(3). Farmers may be required to comply with new and modified standards without receiving cost sharing.

- Clarifies the standards for cost sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

- Identifies a conflict of interest prohibition for Department-certified soil-testing laboratories.

National Agricultural Statistics (2012) show Wisconsin has 9.1 million acres of cropland, not including pastures. Currently about 2.9 million acres are implementing nutrient management plans which leaves 6.27 million acres yet to have plans developed. The cost share rates of $7 per acre increased to $10 per acre due to the additional costs and spreading restrictions. If we multiply 6.27 million acres yet to have a NM plan by an additional $3 per acre, it totals an additional $19 million estimate for the cost of full implementation or $1.9 million annual cost for the next ten years. If these landowners are offered 70% cost-sharing, they would be responsible for paying 30% of the $10 cost per acre or about $2.7 million annually.

Cost Share Requirement Limits Impact

The State cost-share requirement for agricultural producers vary depending on the type of operation and the performance standard, but the revisions to the rules will not change the existing compliance requirements for agricultural operations. Under state law, compliance with the performance standards is not required for existing nonpoint agricultural facilities and practices unless cost sharing is made available for eligible costs.

Wisconsin has 69,000 farms (2014 Wisconsin Ag Statistics). Based on State cost-sharing provided in the 10 years from 2003-2012, the State provided $10-$13 million annually in cost share funds

for practices, and it is likely that funding may decline.[2] Annually, $2 to $4 million in the form of bond revenue funds are to pay for hard, viewable, practices such as manure storage and grassed waterways. Annually, $2.5 million is available for NM program implementation, including farmer education, cost share payments for plan development, and the Producer-Led Watershed Protection Grant program.

Nutrient management alone had an estimated cost of $6.5 million per year assuming full, voluntary statewide compliance with this nutrient management rule. Actual costs in the short term will be lower because some farmers will not comply voluntarily and cannot be forced to comply without cost sharing. The current shortage of cost-share dollars effectively limits total enforcement. However, noncompliance will drive up soil-test phosphorus levels over time, and that will increase long-term compliance costs. Many farmers will actually save money by complying with this rule, and benefits will generally increase over time.

A farmer can prepare their own nutrient management plan, if the farmer is qualified as a nutrient management planner. However, this rule may increase demand for professional nutrient management planning services. Farmers who comply with a nutrient management plan prepared or approved by a qualified nutrient management planner, other than the farmer, are presumed to comply with the nutrient management standards in this rule. The nutrient management planner is responsible for ensuring that the plan complies with the nutrient management standards.

Department Impact Analysis

Under the State framework for managing farm runoff, the Department is responsible for implementation of performance standards promulgated by DNR. The 2005 and the 2015-590 NM Standard state that the alternative to the WI phosphorus index strategy is the soil test phosphorus strategy. This section of the 590 NM Standard remains unchanged. In the end, the key focus of ch. ATCP 50 rule revisions involves implementation of the 2015-590 NM Standard.

Farmers

Implications for Recipients of Farmland Preservation Program (FPP) Tax Credits

The impacts from this rule on farmers participating in the FPP arise from the changes related to FPP implementation. In the case of the 13,500 farmers who collected $18 million in farmland preservation tax credits (based on 2015 payments for tax year 2014 claims), they may be required to comply with new and modified standards without receiving cost sharing. Identifying impacts with precision is complicated by a number of factors, including the changes in program participants over time, the compliance status of new participants, and the range of options to achieve compliance.

[2] If recent history is any indicator, the State is less likely to increase spending and incur debt. In 2012, for example, the Department and DNR each year provided counties about $10.8 million in cost-share funding, a reduction of nearly $8.0 million from the amount provided in 2002 when there were fewer performance standards.

The Department's rule revision clarifies and limits impacts on this group by providing time for program participants to comply with the new performance standards, using performance schedules. In addition, the rule clarifies that certificates of compliance issued to farmers complying with standards can be modified if some land is sold. Certificates of compliance are rendered void if all the land is under new ownership or a county land conservation committee issues a notice of noncompliance if a landowner no longer complies. Conversely, a county land conservation committee can withdraw a notice of noncompliance if the landowner is again found in compliance with standards. Also, farmers may receive cost sharing to install conservation practices necessary to maintain their eligibility for tax credits. Last, but not least, farmers who feel the compliance burdens are too great may decide to stop collecting a tax credit rather than implement standards.

Recordkeeping and New Skills Required

In considering impacts, the Department must evaluate additional reporting or record-keeping requirements imposed on farmers with respect to nutrient management planning. The Department believes these impacts will not be significant. Among the chief reasons for this conclusion, the Department assumes that these obligations will not arise in most cases unless farmers are provided cost-sharing. For those farmers who must comply with nutrient management requirements related to nutrient application restrictions for winter spreading or other seasons, the Department provides funding to maintain NM planning software, SnapPlus, developed with the University of Wisconsin's Soil Science Department. SnapPlus software includes planning tools that communicates with map data. SnapPlus brings field features that may restrict nutrient applications and other provisions in the 2015-590 NM Standard into the farmer's database to show the planner where application timing or rates may need to be adjusted in order to comply with the 2015-590 NM Standard. This software saves the planner's time and the farmer's money in planning and updating costs. For those farmers who must comply with nutrient management requirements related to the phosphorus index (PI), the Department clarified that a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3) and provides that in accordance with both the 2005-590 NM Standard and 2015-590 NM Standard the alternative to the PI is complying with the soil test P management strategy.

Farmers claiming FPP tax credits must keep records to document compliance with the DNR performance standards adopted in 2002. For FPP participants, additional recordkeeping created by this rule should be minimal. For example, since farmers must keep records related to nutrient management plans, farmers should be able to readily incorporate requirements relating to the 2015-590 NM Standard into their systems.

The increased requirements for nutrient management planning are slight in comparison with the responsibilities imposed on farmers in 2002 when the nutrient management standards were first adopted for cropland, or in comparison to 2005 when the standard was modified to include the phosphorus component. By its nature, the business of farming requires that farmers be skilled at managing changes triggered by the need to incorporate new technologies, respond to growing conditions, or modify production methods. In the case of nutrient management, farmers may need to build their skills with computers to take advantage of NM planning tools. Whether the challenge involves recordkeeping or new skills, the demands of this rule should be viewed in the larger context of the many programs in which farmers participate. Farmers need to make changes to meet

other program requirements including state and local permitting and federal cost-share programs. Many programs, from county manure storage permits to FPP, require farmers to have nutrient management plans for their cropland. For farmers in these programs, it is a small step, and in some cases easier to implement the 2015-590 NM Standard provisions into these required nutrient management plans.

The Department believes that recordkeeping and other increased responsibilities are offset by a number of factors including the rule provisions that minimize burdens, and the following potential benefits from implementation of the 2011 DNR standards through the 2015-590 NM Standard:

- Promotion of more efficient use of nutrients and cost-savings on fertilizer through nutrient management planning.
- The implementation of conservation practices that provide protection against environmental and other landowner liabilities created by runoff events or groundwater contamination.
- The protection of water quality, particularly for: drinking water wells, Silurian dolomite features, DNR well compensation areas, additional winter spreading prohibition areas from drinking water wells, and soils vulnerable to N leaching.

Non-Farm Businesses

This rule has the following impacts on non-farm businesses, a considerable number of which qualify as "small businesses."

Nutrient Management Planners and Crop Consultants

This rule will marginally increase the demand for professional nutrient management planners to develop nutrient management plans. Nutrient management planners who prepare plans for others must be qualified to do so. They must understand and follow record keeping requirements related to soil types, soil tests, crop nutrient requirements including University of Wisconsin recommendations, nutrient applications, nutrient contents of manure, nutrient application scheduling, and other matters related to nutrient management. Planners holding certain professional credentials are presumed to be qualified. Professionals with the knowledge and skill to use SnapPlus, a computer program critical to calculating the phosphorus index, are in a special position to capture new business. The rule also impacts planners by requiring a qualified NM planner to complete a NM checklist form, provided by the Department, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent.

Farm Supply and Farm Service Organizations

This rule will marginally increase the demand for entities that provide services to farmers. Farm supply and farm service organizations may provide nutrient management planning services, crop consulting, fertilizer sales, conservation compliance and other services. They may also sponsor the Department-approved training courses for farmers who wish to develop their own nutrient management plans.

This rule will not necessarily change demand for manure hauling services.

This rule is not likely to have a measurable impact on the sales of agricultural fertilizers, since it will not likely create an increase in sales to those farmers who must manage nutrients more carefully. Persons selling agricultural bulk fertilizer to farmers must record the name and address of the nutrient management planner (if any) who prepared the farmer's nutrient management plan. This rule does not prohibit the sale of fertilizer to a farmer who lacks a nutrient management plan.

Soil Testing Laboratories

This rule will moderately increase demand for soil testing. Nutrient management plans must be based on soil tests conducted by certified laboratories. The Department certifies soil testing laboratories and may audit laboratories to ensure accurate testing. This rule adds a conflict of interest provision for the purposes of compliance with 50.04 (3). A Department-certified, privately owned laboratory shall not perform soil test analysis on cropland managed or owned by a person managing or having a substantial financial interest in the laboratory.

Construction Contractors

This rule does not substantially change demand for construction practices other than continuing the requirement to maintain grassed waterways in areas of reoccurring gullies. Nor does the rule alter construction standards or recordkeeping requirements.

Conservation Engineering Practitioners

This rule does not substantially change demand for agricultural (conservation) engineers and engineering practitioners. Under this rule, as under prior rules, conservation engineering practitioners must be certified by the Department. This rule revision simplifies the cancelling of a certification in certain situations without a Department order if the practitioner submits a written acknowledgement voluntarily agreeing to the cancellation. The rule clarifies the standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

Recordkeeping and New Skills Required for Non-Farm Businesses

This rule does not directly trigger changes in reporting, bookkeeping, or other procedures for non-farm businesses.

Business professionals will need to enhance their skills to help farmers implement the 2011 DNR standards; however, these professionals will likely take these actions for reasons other than this rule. Engineers and nutrient management planners must keep pace with the latest technical standards to meet the needs of customers. Certain professionals such as engineers and certified crop advisers are required to update their skills to retain their registration or certification.

Reporting, Bookkeeping, and other Procedures

To the extent that this rule requires reporting, bookkeeping, or other procedures, the Department's analysis is included in the prior sections covering impacts on farmers and non-farm businesses.

Professional Skills Required

To the extent that this rule requires changes in professional skills, the Department's analysis is included in the prior sections covering impacts on farmers and non-farm businesses.

Accommodation for Small Business

The Department has taken steps to identify compliance and reporting effects of this rule change. This final rule draft considered: (1) the existing performance standards and prohibitions in ch. NR 151, (2) the requirements of NRCS technical standard 590 needed to meet the nutrient management performance standard, (3) assumptions contained in the Wisconsin phosphorus index, and (4) feedback from members of advisory committees that included small business owners and organizations. The Department worked extensively with farm representatives and others to minimize adverse effects of this rule on small business. The Department took the following actions: (1) worked with DNR to determine the scope of the Department rule revision, (2) conducted listening sessions that included farm and conservation groups, (3) held numerous public hearings throughout the state and held the record open afterward to receive written comments, (4) distributed simplified information materials to the public, and (5) reviewed the rule to identify opportunities to minimize impacts and accommodate small businesses.

While DNR's 2011 rule revision established the core requirements, the Department's rule provides accommodations to small businesses. These accommodations minimize the impact on farms and other businesses, both small and large. In general, this rule:

- Clarifies the changes from the 2005-590 NM Standard to the 2015-590 NM Standard and increases the associated cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- Clarifies that the alternative related to s. NR 151.04, the phosphorus index (PI), is a nutrient management plan developed in accordance with the nutrient management provisions in ATCP 50.04(3) and provides that in accordance with both the 2005-590 NM Standard and 2015-590 NM Standard the alternative to the PI is complying with the soil test P management strategy.

- Clarifies the Farmland Preservation section requirements seeking voluntary compliance with the rule changes to the maximum extent feasible, consistent with the Department's past approach. Farmers may be required to comply with new and modified standards without receiving cost-sharing.

- Enables the Department to simplifying the process for cancelling a conservation engineer's certification if agreed to in writing. The rule also provides for a person with the appropriate

level of NRCS job approval authority to certify in writing that the practice complies with this rule.

- Requires a qualified NM planner to complete a NM checklist form, provided by the Department, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent.

- Clarifies a NM plan, and subsequent annual submissions for local regulation means NM plans developed according to s. ATCP 50.04(3). Farmers may be required to comply with new and modified standards without receiving cost-sharing.

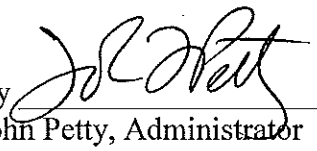
- Clarifies the standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

Conclusion

This rule will have no more than a moderate impact on farmers, including "small businesses." The limited scope of the rule changes, combined with the cost share mandate, account for the reduced impact. Other businesses may slightly benefit from these rule changes.

Dated this 11th day of MAY, 2017.

STATE OF WISCONSIN
DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION

By 
John Petty, Administrator
Division of Agricultural Resource Management

ADMINISTRATIVE RULES
FISCAL ESTIMATE
AND ECONOMIC IMPACT ANALYSIS

Type of Estimate and Analysis

☐ Original ☒ Updated ☐ Corrected

Administrative Rule Chapter, Title and Number

Ch. ATCP 50, Soil and Water Resource Management Program

Subject

Adoption of the updated 2015 Nutrient Management Standard 590

Fund Sources Affected	Chapter 20, Stats. Appropriations Affected
☒ GPR ☐ FED ☐ PRO ☐ PRS ☒ SEG SEG-S	20.115(7)(c), 20.115(7)(qe), 20.115(7)(qf), 20.866(2)(we)

Fiscal Effect of Implementing the Rule

☒ No Fiscal Effect ☐ Indeterminate	☐ Increase Existing Revenues ☐ Decrease Existing Revenues	☐ Increase Costs ☐ Could Absorb Within Agency's Budget ☐ Decrease Costs

The Rule Will Impact the Following (Check All That Apply)

☒ State's Economy	☒ Specific Businesses/Sectors
☒ Local Government Units	☐ Public Utility Rate Payers

Would Implementation and Compliance Costs Be Greater Than $20 million?

☐ Yes ☒ No

Policy Problem Addressed by the Rule

This rule incorporates the new NRCS 590 standard, which was published in 2015. This rule targets current inconsistencies and confusion among nutrient planning requirements. In addition, proposed changes are needed to clarify existing requirements and provide options for more flexibility. Finally, specific rule provisions target protection of human health and the environment, specifically related to drinking water, reduction of nutrient delivery to surface, and maintaining soil productivity.

Summary of Rule's Economic and Fiscal Impact on Specific Businesses, Business Sectors, Public Utility Rate Payers, Local Governmental Units and the State's Economy as a Whole (Include Implementation and Compliance Costs Expected to be Incurred)

Local Governments

The rule updates the requirements for nutrient management plans on Wisconsin farms. As such, it does not mandate that any local government resources be expended on the development, review, or approval of nutrient management plans beyond their current commitments. The rule is not expected to have a fiscal impact on local units of government. County land conservation department staff and agricultural agents will likely receive requests for information on provisions of the rule. This responsibility will likely be incorporated into county land and water conservation programs with no net fiscal impact.

Agricultural Businesses

This rule will have a moderate impact on farms in this state. Many of these farms are "small businesses." This rule may also affect the following businesses:

- Nutrient management planners, including private crop consultants, farm cooperatives, and farm supply organizations that provide nutrient management planning.
- Soil and manure testing laboratories and businesses that haul manure.

- Commercial fertilizer dealers.
- Businesses that design and install farm conservation practices.

This rule will have the greatest impact on livestock operations, which may incur additional costs related to the disposal of manure (provides more phosphorus than nitrogen, compared to crop needs). Additional costs will be mainly related to manure hauling. The cost for an individual livestock operation will depend on a number of factors, but the existing level of soil test phosphorus and soil erosion is critical. If these levels are reduced, costs will be lower over time.

Wisconsin has 9.1 million acres of cropland, not including pastures. Currently about 2.9 million acres are implementing nutrient management plans, which leaves 6.27 million acres yet to have plans developed. The cost share rates of $7 per acre will increase to $10 per acre due to the additional costs and spreading restrictions. The increase in the cost share rate for 2015-590 NM plans is attributed to an increase in costs for soil testing and labor, additional restrictions in the 2015-590 NM Standard that may require more land to apply manure compared to the 2005-590 NM Standard, and a potential increase in the amount of time spent by NM planners to develop a NM plan that complies with the 2015-590 NM Standard. The potential need for more land to apply manure is due to the additional spreading restrictions; however, not all farms will be impacted to the same degree by these restrictions. If these landowners are offered 70% cost-sharing, they would be responsible for paying 30% of the $10 cost per acre.

Utility Rate Payers
The rule will have no impact on utility rate payers.

General Public
The rule will have no fiscal impact on the general public.

Benefits of Implementing the Rule and Alternative(s) to Implementing the Rule

Benefits

This rule will benefit agriculture businesses and the general public by helping to prevent manure and phosphorus runoff, and improve water quality.

Agricultural Operations and Plan Preparers
This rule will not add significant costs for most farm operations. Most farmers who comply with current rules will be able to comply with the new rules at little additional cost. Many farmers will actually save money by complying with this rule and benefits will generally increase over time. A farmer can prepare his or her own nutrient management plan, if the farmer is qualified as a nutrient management planner. However, the rule may increase demand for professional nutrient management planning services, as they prepare over 70% of the plans annually. Farmers who comply with a nutrient management plan prepared or approved by a qualified nutrient management planner (other than the farmer) are presumed to comply with the nutrient management standards in this rule. The nutrient management planner is responsible for ensuring that the plan complies with the nutrient management standards. Updating this rule will maintain consistent state and federal standards. The Department made a commitment, when it adopted nonpoint rules in 2002, to keep Wisconsin rules consistent with federal standards. Farmers must follow essentially the same steps under the new standard as under the current standard. The new standard provides more flexibility in some instances. Enforcement will be contingent on cost-sharing. Farmers who comply can receive federal and state cost share funds.

Fertilizer Dealer Businesses
This rule may have some impact on fertilizer dealers, by reducing demand for phosphorus and increasing demand for nitrogen fertilizer in some cases. They may see a reduction in fall nitrogen

applications, which if needed, will be applied in the spring.

This rule will marginally increase the demand for entities that provide services to farmers. Farm supply and farm service organizations may provide nutrient management planning services, crop consulting, fertilizer sales, conservation compliance, and other services. They may also sponsor the Department approved training courses for farmers who wish to develop their own nutrient management plans. Persons selling agricultural bulk fertilizer to farmers must record the name and address of the nutrient management planner (if any) who prepared the farmer's nutrient management plan. This rule does not prohibit the sale of fertilizer to a farmer who lacks a nutrient management plan.

General Public

The general public will benefit from this rule as a result of the consumer, human health, and environmental protections offered through proper use of crop nutrients. It will help ensure manure, an important crop nutrient, is applied in a cost-effective and environmentally sound manner. It will also help limit long-term nutrient management costs and will reduce fish kill and well contamination risks.

Alternatives

This rule is designed to clarify and modernize existing rules and ensure regulatory consistency between state and federal standards. If the Department does not adopt this rule there will continue to be inconsistencies and confusion among nutrient planning requirements. In addition, changes being proposed to clarify existing requirements and provide options for more flexibility will not be enacted. Finally, provisions being established to protect human health and the environment, such as new mechanical manure application requirements creating a 50 feet setback in spring, summer, fall, and a 300 feet setback in winter around conduits to groundwater, will not be enacted, which could lead to unsafe drinking water.

Long Range Implications of Implementing the Rule

Long-term, implementing this rule will benefit business, the general public, and the environment. The rule modifications will provide additional options for businesses to meet existing regulations more efficiently and additional marketing opportunities that could lead to new business. In addition, the rule modifications create consistency between the state and federal standard, this rule, and other existing rules.

Compare With Approaches Being Used by Federal Government

The United States Environmental Protection Agency ("EPA") regulates livestock facilities over 1000 animal units using the Natural Resources Conservation Service ("NRCS") 590 Nutrient Management Standard as a base requirement. NRCS uses the 590 standard in promoting better conservation practices through cost-sharing.

Compare With Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota)

Surrounding states, including Michigan, Minnesota, Illinois, and Iowa regulate livestock facilities with over 1000 animal units using the NRCS 590 Nutrient Management Standard as a base requirement under EPA authority. Each state has a federally approved 590 standard which may have state specific requirements, similar to Wisconsin's. The state specific requirement must be at least as stringent as the federal standard, but may be more or less stringent than Wisconsin's, depending on the topic.

Wisconsin's approach differs from the programs in adjacent states pursuant to s. 281.16, Stats., in that cost sharing must be made available to existing small and medium size agricultural operations before the State may require compliance with the standards. However, nutrient management can be required without cost-sharing if regulated by a permit for livestock facilities with over 1000 animal units, regulated by a local manure storage or livestock siting ordinance, caused a significant discharge, accepting manure storage cost share funds, or participating in the Farmland Preservation tax credit program.

Comments Received in Response to Web Posting and DATCP Response

There were no public comments received during the required posting period for economic impact. The Department incorporated all of the editorial changes suggested by the Legislative Council Rules Clearinghouse. These changes were not substantive. Minor technical changes were made to update standards for cost-shared practices in subchapter VIII. Comments related to implementing the 590 NM standard will be addressed through the 2015-590 NM Standard Checklist and the SnapPlus software. The comments received at hearing did not result in changes to the proposed rule.

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